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DOCUMENTI E STUDI SULLA TRADIZIONE FILOSOFICA MEDIEVALE

*An International Journal on the Philosophical Tradition
from Late Antiquity to the Late Middle Ages
of the Società Internazionale per lo Studio del Medioevo Latino
(S.I.S.M.E.L.)*

XXVIII

2017

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XXVIII

2017

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SOMMARIO

AMOS BERTOLACCI, TOMMASO ALPINA, <i>Introduction</i>	pag. VII
FRANÇOISE HUDRY, <i>La traduction latine de la Logica Avicennae et son auteur</i>	» 1
SILVIA DI VINCENZO, <i>Is There a versio vulgata of Avicenna's Kitāb al-Šifā' ? On the Hypothesis of a Double Recension of Kitāb al-Madḥal</i>	» 29
NICCOLÒ CAMINADA, <i>A Latin Translation ? The Reception of Avicenna in Albert the Great's De praedicamentis</i>	» 71
RICCARDO STROBINO, <i>Avicenna's Kitāb al-Burhān, II.7 and its Latin Translation by Gundissalinus : Content and Text</i>	» 105
GAIA CELLI, <i>The Rhetoric Section of the Kitāb al-Šifā' : Hermannus Alemannus' Latin Translation and the Arabic Witnesses</i>	» 149
FRÉDÉRIQUE WOERTHER, <i>Citer/traduire. La traduction arabo-latine de la Rhétorique d'Aristote par Hermann l'Allemand et les citations d'al-Fārābī et Averroès</i>	» 177
JULES JANSSENS, <i>The Liber primus naturalium, i.e. the Physics of the Avicenna latinus</i>	» 219
ALESSIA ASTESIANO, <i>L'inizio di un movimento nella fisica del continuo : Avicenna lettore di Aristotele (Libro della guarigione, Fisica, III, 6)</i> . . .	» 239

CRISTINA CERAMI, <i>The De Caelo et Mundo of Avicenna's Kitāb al-Šifā' : An Overview of its Structure, its Goal and its Polemical Background . . .</i>	pag. 273
SILVIA DI DONATO, <i>Les trois traductions latines de la Météorologie d'Avicenne: notes pour l'histoire du texte.</i>	» 331
ELISA RUBINO, <i>The Commentary of Alfred of Shareshill on the Pseudo-Aristotelian De mineralibus</i>	» 351
TOMMASO ALPINA, <i>Al-Ğüzğānī's Insertion of On Cardiac Remedies in Avicenna's Book of the Soul : the Latin Translation as a Clue to his Editorial Activity on the Book of the Cure?</i>	» 365
AAFKE M. I. VAN OPPENRAAY, <i>Avicenna's Liber de animalibus ('Abbreviatio Avicennae'). Preliminaries and State of Affairs.</i>	» 401
RÜDIGER ARNZEN, <i>Double Translations in the Latin Version of the Metaphysics of Avicenna's Kitāb al-Šifā'</i>	» 417
ALFONSO QUARTUCCI, <i>Avicenna's Notion of al-mawḍū' al-awwal ('first subject') in Ilāhiyyāt, I, 1-2 and its Latin Reception</i>	» 441
AMOS BERTOLACCI, <i>The Latin Translation and the Original Version of the Ilāhiyyāt (Science of Divine Things) of Avicenna's Kitāb al-Šifā' . . .</i>	» 481
NICOLA POLLONI, <i>Gundissalinus and Avicenna : Some Remarks on an Intricate Philosophical Connection.</i>	» 515
IVANA PANZECA, <i>On the Persian Translations of Avicenna's Ilāhiyyāt.</i>	» 553
INDICE DEI MANOSCRITTI	» 571
INDICE DEI NOMI	» 575

Introduction

The present volume hosts the proceedings of the conference ‘A Crossroad between East and West: The Latin Medieval Translations of the *Kitāb al-Šifā*’ (*Book of the Cure*) of Ibn Sīnā (Avicenna)’, which took place in Pisa, Scuola Normale Superiore, on 1-3 July 2015 in the framework of the project ‘Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the Metaphysics (*Ilāhiyyāt* of *Kitāb al-Šifā*)’ of Avicenna (Ibn Sīnā)’, financed by the European Research Council (ERC Advanced Grant, 2014-2019, www.avicennaproject.eu). Some additional articles (N. Caminada, A. Astesiano, N. Polloni, I. Panzeca) complement the papers first presented at the conference. The decision to devote a conference expressly to the Latin translations of the various parts of Avicenna’s philosophical masterpiece produced during the Middle Ages, and, now, to publish the papers of the meeting in a self-standing volume that deals comprehensively with the topic — in both cases for the first time, to the best of our knowledge — finds its justification in the necessity of approaching this key event of the Arabic-into-Latin transmission of philosophical culture in a comprehensive rather than piecemeal way.

The Latin medieval translations of the *magnum opus* of Avicenna (Ibn Sīnā, d. 428H/1037) in philosophy, the *Kitāb al-Šifā*’ or *Book of the Cure/Healing*, are interesting in many respects. First, these translations are ancient and valuable witnesses of the *Šifā*’: in some cases their chronological distance from the period of composition of Avicenna’s work (1020-1027 ca.) does not exceed one century and a half. This temporal closeness makes the Latin translations at stake very precious tools for the reconstruction of the original Arabic text of the *Šifā*’. Second, they cover much of the *Šifā*’: altogether, they encompass a large portion of this massive encyclopedia of logic, natural philosophy, mathematics and metaphysics, and convey into Latin a comprehensive picture of this highly articulated and structured work, although they privilege some of its four main parts over others. Third, numerous and important scholars of the time, many of whom were prime exponents of the European philosophical scenario, acted as translators. These noteworthy aspects of the complex of translations under investigation can be adequately grasped only by means of a synoptic view, capable of highlighting analogies and differences in content and style among the various translations, and of tracing stable elements and developments in their temporal sequence. Cumulatively, the papers delivered at the conference and gathered in the present volume — with their *status quaestionis* and research agenda about each of the extant translations, from logic to metaphysics — meet this task. These introductory pages are meant to briefly sketch the framework in which the following contributions

can be placed. The relevant data to be considered, expounded in details in the articles of the volume, are summarized in the following table.

Conspectus of the Latin Translations of the *Šifā'*

Preface and (I) Logic (9 sections)										
<i>Šifā'</i>	Preface	<i>Madḥal</i>	<i>Maqūlāt</i>	<i>ʿIbāra</i>	<i>Qiyās</i>	<i>Burhān</i>	<i>Ġadal</i>	<i>Safsāṭa</i>	<i>Ḥiṭāba</i>	<i>Ši'r</i>
Model	---	Porphyry, <i>Isagoge</i>	<i>Categories</i>	<i>De Int.</i>	<i>An. Pr.</i>	<i>An. Post.</i>	<i>Topica</i>	<i>El. Soph.</i>	<i>Rhetor.</i>	<i>Poet.</i>
Phase 1		Logica	---	---	---	II.7	---	---	---	---
Phase 2	---	---	---	---	---	---	---	---	fragm.	---

(II) Natural Philosophy (8 sections)										
Šifā`	Samā` ṭabī`ī			Samā` wa- `Ālam	Kawn wa- Fasād	Af`āl wa- Infi`ālāt	Ma`ādin wa-Āṭār `ulwiyya	Nafs	Nabāt	Ḥayawān
Model	Physica			De Caelo	De Gen. et Corr.	Meteor.	Meteor.	De Anima	Ps.- Arist., De Plantis	Hist. Part. Gen. Animal.
Phase 1	Liber I Natur. I.1- III.1		---	---	---	---	I.1, I.5, II.6 (De Miner.)	De Anima	---	De Animal.
Phase 2		III.1- 10	---	De Caelo	De Gen. et Corr.	De Act. Pass. Qualitatum Primarum	Libri Meteororum	---	attested	---

(III) Mathematics (4 sections)				
<i>Šifā'</i>	<i>Uṣūl al-handasa</i>	<i>ʿIlm al-hay'a</i>	<i>Ḥisāb</i>	<i>Ġawāmi' ʿilm al-mūsīqā</i>
Model	Euclid, <i>Elements</i>	Ptolemy, <i>Almagest</i>	Nicomachus of Gerasa, <i>Introd. Arit.</i>	Ptolemy, <i>Harmonica</i>
Phase 1	---	---	---	---
Phase 2	---	---	---	---

(IV) Metaphysics (1 section)	
<i>Šifā'</i>	<i>Ilāhiyyāt</i>
Model	<i>Metaphysics</i>
Phase 1	<i>Philosophia prima sive Scientia divina</i>
Phase 2	---

1) Chronology. The *Šifā'* was translated into Latin during the XII and XIII centuries, in distinct places and moments. In a chronological perspective, the translation activity can be grouped around two main phases. The first phase (Phase 1 in the table) was generated by translators active in the city of Toledo, or related to it for biographical reasons, from 1150 until circa 1250. The second, less extensive and more shadowy phase (Phase 2) occurred in Burgos in the second half of the XIII century. The second phase of translation looks to be dependent on the first, and to be considered by the translators as its continuation: significantly, the Latin translation of the first section of natural philosophy starts in the second phase exactly where it had stopped in the first, i.e. in correspondence with chapter III.1. The Spanish environment is not the only common feature of these two phases. The second, with its exclusive focus on the natural philosophy of the *Šifā'*, appears to share the same scientific interests and operational options of the first phase, which had not exceeded the boundaries of the natural philosophy and the metaphysics of the work, apart from an incursion into its logic, with a conspicuous neglect of mathematics. The main difference between the two phases holds *a posteriori*, and it is given by the diffusion of the translations: whereas the versions produced during the first phase enjoyed a wide circulation, the ones composed during the second phase had a much more limited dissemination.

The Latin translations of the *Šifā'*, especially those produced during the first phase of the translation activity, hold a very high chronological position among the testimonia of the original Arabic text of the work. The Latin translation of the metaphysical section of the work, the *Ilāhiyyāt*, documents this point in full clarity. This translation was accomplished in the second half of the XII century, probably in the third quarter of the century, under the title of *Liber de Philosophia prima sive Scientia divina*, on the basis of an Arabic model that we cannot date precisely and which could be potentially much older than the translation itself. But, regardless of the exact date of the Arabic manuscript(s) on which the Latin translation was made, this latter belongs to the small group of the most ancient testimonies of the *Ilāhiyyāt* presently known, namely a sample of extant Arabic manuscripts and some attested codices dating back to the V/XI and VI/XII centuries. More precisely, at the present state of research, the *Philosophia prima* figures in the 'top ten' of the most ancient extant witnesses of the work. Its ancientness, noteworthy in itself, is even more remarkable, if we consider that among the manuscripts at the basis of the current printing by means of which we presently know the *Ilāhiyyāt*, i.e. the edition published in Cairo in 1960, the most ancient dates back to the VII/XIII century, and that the *Philosophia prima* conveys readings and ways of disposing chapters and structuring treatises that look more original than those transmitted in the version according to which

we are accustomed to approach Avicenna's text. In other words, the Latin translation is a witness of the *Ilāhiyyāt* which cannot be disregarded both by present scholars interested in grasping precisely Avicenna's original thought in metaphysics, and by future editors undertaking the demanding task of a real critical edition of his metaphysical *magnum opus*.

What applies to the *Philosophia prima* holds, *mutatis mutandis*, for all the other parts of the *Šifā'* translated into Latin during the first phase of translation, and also, to a lesser degree, for the translations accomplished in the second phase.

II) Extent. A substantial portion of Avicenna's *summa* — which consists of twenty-two distinct sections (nine of logic, eight of natural philosophy, four of mathematics, plus the single section of metaphysics) and covers more than five thousands pages in the standard printed edition of the Arabic text — was made available to Latin scholars. Actually, if taken together and considered as translations of one and the same Arabic work, as in fact they are, the distinct Latin translations of the *Šifā'* represent one of the most extensive translations from Arabic into Latin ever made during the Middle Ages. More specifically, during the aforementioned two phases of translation, three of the four main parts of the *Šifā'* were translated into Latin: natural philosophy and metaphysics were translated almost integrally (with the exception of the fourth treatise of the first section of natural philosophy, which was strangely neglected during the second phase of translations, and the last two chapters of the section of metaphysics, which were summarized rather than translated *verbatim*). As to logic, only one entire section, the first, corresponding to Porphyry's *Isagoge*, and some excerpts of the fifth and the eighth sections, corresponding respectively to the *Posterior Analytics* and the *Rhetoric*, are extant (chapter II.7 and scattered fragments, respectively), whereas the remaining six sections were completely overlooked. By contrast, no section of the mathematical part of the *Šifā'* results to have been ever translated.

The decision by the Latin translators of ignoring the mathematics of the *Šifā'*, and of paying greater attention to the natural philosophy and the metaphysics of the work than to its logic, does not reflect the importance that Avicenna himself ascribes to these disciplines in this *summa*: mathematics is one of its substantial constituents — contrary to what happens in the case of other less extensive *summae* by Avicenna, where mathematics is absent or is copied from previous works — and logic is, by and large, the most extensive part of this work. If we assume that a complete text of the *Šifā'* was available in Andalusia at the time of the translations, the translators' selection of the parts of the work to be rendered into Latin arguably mirrors their own interests and the scientific needs of the intended audience of the translations: thanks to previous translations, Latin readers had already at their disposal abundant material regarding the Arabic *quadrivium*; moreover, they were more attracted by a new

and comprehensive world-view such as the one proposed by Avicenna, than by a logical theory that, despite its originality, was less new in the Latin world. In particular, the choice of privileging within the logic of the *Šifā'* the section dealing with Porphyry's *Isagoge* might be a consequence of the still lively debate on universals in Latin philosophy since the time of Roscelin, Abaelard and the likes in the first half of the XII century. In other words, whereas the Avicenna Arabus is, in the *Šifā'*, a logician and a mathematician no less than a natural philosopher and a metaphysician, the Avicenna Latinus conveys an image of the author much more leaning towards natural philosophy and metaphysics, thus influencing the view of Avicenna that Western scholarship has had since then.

Of the three parts of the *Šifā'* translated into Latin, the data regarding the manuscript dissemination document a wider diffusion of natural philosophy and metaphysics with respect to logic: the *Logica* of Avicenna counts 13 Latin manuscripts, much fewer than those of the *De Mineralibus* (148 mss.) — transmitted by a large number of testimonia due to the connection of the translation of this part of the *Šifā'* with the Latin translation of Aristotle's *Meteorology*, to which it was attached — the *De Anima* (50 mss.), the *De Animalibus* (33 mss.), the *Philosophia Prima* (25 mss.), and the *Liber primus naturalium* I-III.1 (22 mss.). A much more meager manuscript diffusion regards the Latin translation of the Preface (2 mss.) — namely the Introduction to the *Šifā'* written by al-Ğūzġānī, Avicenna's secretary and biographer, and the Prologue by Avicenna himself — and the translation of the sections of natural philosophy accomplished during the second phase (1 ms.). The Latin translation of the Preface, despite the interest of this preliminary section of the *Šifā'*, counts few testimonia probably because of its extrinsic connection with the translation of the part on logic; the same applies to the translations of the sections of natural philosophy made available in Latin during the second phase because of their production in a philosophical setting in which Avicenna's philosophy, after the translation of Averroes' commentaries, had ceased to function as a tool for interpreting Aristotle's thought for Latin readers, losing any pivotal position in university curricula. Since the largest share of extant manuscripts of the most widespread translations has been copied between the second half of the XIII century and the beginning of the XIV, it seems that the 'long wave' of interest in Avicenna's philosophical masterpiece started dwindling around the middle of the XIV century, until its resurgence with the Renaissance printings.

III) Translators. The Latin translators of the *Šifā'* in the first phase of the translation activity are among the prime exponents of Jewish and Latin philosophy of the XII century. There is no need to emphasize the importance and significance of figures like Abraham Ibn Daud (Avendauth in Latin), Dominicus Gundissalinus, Alfred of Sareshel, and Michael Scot, who were not

only translators, but also commentators and receptors of Avicenna' thought, as well as original thinkers with a clear-cut intellectual profile and a well-defined cultural agenda. In the second phase of translation, Hermannus Alemannus — the translator of the excerpts of the section on rhetoric — certainly holds a status comparable to that of his predecessors, whereas Johannes Gualterius and Salomon — to whom the translation of several sections of the natural philosophy is ascribed — are for the moment more shadowy figures.

Both phases were characterized by team-work, at different levels and in various degrees. More in particular, in both cases the translation activity was marked by the cooperation of Jewish and Christian scholars under the patronage of ecclesiastic authorities in Andalusia after the *reconquista*. The presence and active contribution of the Jewish component in a cultural phenomenon that *prima facie* seems to concern exclusively the transmission of philosophy from the Muslim world to the Christian cultural environment is worth attention: rather than linear, this process of cultural transmission has to be conceived as triangular: Ibn Daud and Salomon, on the Jewish side, worked in cooperation with, respectively, Gundissalinus and Johannes Gualterius, and under the patronage of churchmen, on the Christian side, for the translation into Latin of the work of a Muslim philosopher like Avicenna. If we tend to consider the Jewish component of this process as less relevant than the Christian one, we have also to keep in mind that this impression might just be a retrospective deformation of the historical reality due to our present greater familiarity with the latter than with the former. Ibn Daud, in particular, was the real promoter and sponsor of the first and fundamental 'Avicenna Latinus project' in the Middle Ages. In other words, the Latin translations of Avicenna's *Šifā'* are the result of the joint efforts of distinct scholars that in some cases were unaware of each other for geographical or historical reasons, but that in fact constitute *in nuce* a 'community of learning' and a small intercultural and cross-confessional 'translation movement' within the larger framework of the transfer of knowledge from Arabic into Latin. Thus, the Latin translations of the *Šifā'* put us in front of a glaring example of fruitful cultural interaction, capable of coexisting with, and in a way also of countering, the fiery competition that took place, at the same time, on the religious, political, and military side. The translations under consideration show that the so-called 'dark Middle Ages' of the Arab conquest and of the Crusades are also, at the same time, the 'bright Middle Ages' of the transfer of culture from Muslim lands, by means of Jewish scholars, into European universities, and of the circulation of knowledge among intellectual communities of different creeds and religious affiliations across the shores of the Mediterranean Sea.

IV) Context. If we enlarge the perspective and set the event under consideration in the larger context of the translation movement from Arabic

into Latin to which it belongs, we notice some interesting facts, which are also guidelines for future research. First, the *Šifā'* is the only philosophical work by Avicenna systematically translated into Latin during the Middle Ages: among the other Avicennian *summae* of philosophy, only some quotations or fragments of the *Kitāb al-Išārāt wa-l-Tanbihāt* (*Book of Pointers and Reminders*) and of the *Kitāb al-Nağāt* (*Book of the Salvation*) are preserved in the *Pugio Fidei* of the Dominican Ramon Martí in the XIII century. This positively documents the keen perception that the Latin translators had of the paramount importance of the *Šifā'* within Avicenna's philosophical output, and of the particularly enhanced Peripatetic character of this *summa*, which was congruent with their search of an all-encompassing interpretation of Aristotle.

However, in a second respect, the *Šifā'* is in no way the only work of Avicenna translated into Latin in the Middle Ages: also the important *Qānūn fī l-Ṭibb* (*Canon of Medicine*) and other minor medical works by Avicenna were made available to Latin readers. The *Canon* was translated by Gerard of Cremona in Toledo in the XII century, in the same place and time of the first phase of the translation activity concerning the *Šifā'*. Thus, the two most important Toledan schools of translations from Arabic into Latin (the team made by Ibn Daud and Gundissalinus, on the one hand, and the school of Gerard of Cremona, on the other) were engaged, almost at the same time, in the translation of Avicenna's two masterpieces in philosophy and in medicine respectively. The two works are constitutively linked, since the zoology of the former is tributary to the anatomy and physiology of the latter. The Toledan translators might have caught this intimate bond. For sure, the Latin receptions of these two works cannot be studied separately, since one has certainly influenced the other, in ways that have still to be explored in detail.

Third, the Latin translations of Avicenna's works are not an isolated case, since they are both preceded and followed by many other translations of Arabic works into Latin, through which a considerable amount of Arabic philosophy and science became available to Latin readers. The specific role and peculiar interactions of the translations of Avicenna within this larger framework remain to be studied more closely. In particular, the Latin reception of Avicenna's philosophy cannot be accurately understood without keeping into consideration the existence and circulation of translations of his 'summarizer' and 'follower' Algazel (al-Ġazālī, d. 1111, of which Latin readers of the XII and XIII centuries knew only the digest of Avicenna's philosophy entitled *Maqāṣid al-Falāsifa*, *Intentions/Doctrines of the Philosophers*), and of his 'enemy' and 'critic' Averroes (Ibn Rušd, d. 1198).

Finally, Latin is not the only medieval language in which Avicenna's *Šifā'* was translated. Hebrew and Persian translations of the work are also extant, and

extensive quotations of it in Syriac are preserved. A synoptic view of the way in which the translations of the *Šifā* in these different languages differ from, or are similar to one another, in terms of extent, style, and impact, is also a major desideratum of future research. This kind of comparative approach can shed light not only on the width of the influence of Avicenna's masterpiece in philosophy from Muslim Spain until India, but also on the intellectual trends at work in the distinct linguistic and cultural environments in which this work left its mark.

There is no need to enter into further detail, since most of the sections of the *Šifā* translated into Latin will be the object of at least one paper in the present volume. The order in which the articles are presented is thematic — from logic, through natural philosophy, to metaphysics — disregarding whether the consecutive sections of the *Šifā* taken into consideration were translated into Latin during the first or the second phase of the translation activity.

In the first contribution, Françoise Hudry documents the literary richness of the language employed by the Latin translator of the *Madḥal*, the first section of the logic of the *Šifā* corresponding to Porphyry's *Isagoge*. She also endeavors to assess the identity of the translator of the parts of this translation of uncertain authorship: on the basis of the ascription to Ibn Daud of the translation of chapter I.12 attested by manuscripts, she collects the evidence pointing at this latter as the possible translator of the entire *Madḥal*. Her findings, if compared with the alternative opinion of M. Alonso Alonso (now corroborated by the computational techniques employed by Dag N. Hasse), according to which Gundissalinus is a more likely candidate, raise the interesting question of whether this translation might have resulted from some kind of synergy between the two.

By examining the manuscript tradition of Avicenna's *Madḥal*, and comparing fifty-nine witnesses of the Arabic text with the Latin translation, Silvia Di Vincenzo advances the persuasive hypothesis that there were two different recensions of this section of Avicenna's *Šifā*, an earlier one, which is preserved in eleven manuscripts, the Latin translation, and the early indirect tradition of the work, and might correspond to Avicenna's first version of the text, and a later one, which she labels *versio vulgata*.

Niccolò Caminada enters into the scholarly debate about the hypothesis that Albertus Magnus might have known, alone among all Latin thinkers, otherwise unattested Latin translations of the second, third, and fifth section of the logic of the *Šifā*, a possibility, first advanced by M. Grignaschi in the seventies, that now several scholars see with skepticism. Caminada confirms that, at least in the case of the *Maqūlāt* (*Categories*) of the *Šifā*, Grignaschi's hypothesis is hardly tenable.

In his article Riccardo Strobino discusses the relationship between chapter II.7 of Avicenna's *Kitāb al-Burhān* (*Book of Demonstration*) and its XII century Latin translation by Dominicus Gundissalinus (fl. ca 1150), famously incorporated by the latter as an independent section in his own *De divisione philosophiae*. This chapter turns out to be extremely important on both the philosophical and philological ground, since it represents the only part of Avicenna's *Burhān* available in Latin translation.

Gaia Celli and Frédérique Woerther devote their papers to Hermannus Alemannus' (fl. XIII century) Arabic-Latin translation of Aristotle's *Rhetoric*. Celli deals primarily with two excerpts from the *Kitāb al-Ḥitāba* (*Book of Rhetoric*) of Avicenna's *Šifā'*, which Hermannus inserted in his translation in order to substitute or explain difficult passages of the Aristotelian text. Likewise, Woerther focuses on the way in which Hermannus uses quotations from Fārābī's and Averroes' commentaries in order to provide a general framework against which Hermannus' use of quotations in his translation of Aristotle's *Rhetoric* can be assessed.

In his article, as a prolegomenon to his forthcoming critical edition of the third treatise of the Latin translation of *Al-Samā' al-ṭabī'ī* (*Physics*) of Avicenna's *Šifā'*, Jules Janssens provides a general overview of the translation techniques used therein on the basis of a close scrutiny of a large sample of passages. In particular, he points out the similarities and the differences between the two phases in which this (partial) translation of the first section of the natural philosophy of the *Šifā'* was accomplished.

Alessia Astesiano discusses the way in which in *Samā' ṭabī'ī*, III.6 Avicenna interprets the Aristotelian tenet according to which every motion has an end, but not a beginning (*Physics*, book VI). The major task of the article is to clarify the most significant passages of this chapter from a doctrinal as well as a textual point of view. In order to achieve her aim, the author examines the most ancient witnesses of the manuscript tradition of Avicenna's *Physics*, many of which have not been taken into consideration in the previous editions, as well as the Latin medieval translation.

The contribution by Cristina Cerami is devoted to *Al-Samā' wa-l- 'ālam* (*On the Heaven and the Universe*, different from the pseudo-Avicennian *De Caelo et Mundo*), the second section of the natural philosophy of the *Šifā'*. In particular, the author provides a comprehensive study of its structure, goals, and place within the framework of Avicenna's natural philosophy. The two major conclusions of the contribution are that, without being a standard treatise of cosmology, Avicenna's treatise must be seen as a study of the five simple bodies that constitute the universe as a whole, and that, within a broader philosophical and historical context, Avicenna's investigation aims at rebuking a neo-Philoponian trend among his contemporaries.

By taking as point of departure the contributions by J.-M. Mandosio on the topic, Silvia Di Donato assumes the Latin translation of Avicenna's *Al-Ma'ādīn wa-l-Āṭār al-'ulwiyya* (*On Minerals and Upper Impressions*) as a privileged observation point to single out some characteristic aspects of the reception of Avicenna's *libri naturales* and, in particular, of the *Meteorology* in the Latin West. The analysis conducted on this work highlights that the Avicennian text played the role of an authoritative reference of Aristotelianism.

Elisa Rubino devotes her contribution to Alfred of Sareshel's commentary on Avicenna's *De mineralibus*, which is the last part of his more extensive commentary on Aristotle's *Meteorologica*. The glosses that constitute this commentary, identified by James K. Otte in 1993, have remained unedited until today. This contribution fills this gap in scholarship by offering the first edition of the Alfredian glosses on *De mineralibus*, which represent, together with the commented text (*De mineralibus*), an important step in the scientific study of mineralogy in the Middle Ages.

In his article Tommaso Alpina reconstructs the textual and editorial vicissitudes of chapters 2-9 of Avicenna's medical treatise *Maqāla fī l-adwiya al-qalbiyya* (*On Cardiac Remedies*, *De medicinis cordialibus* in the Latin translation) that al-Ġūzġānī inserted between the end of the fourth treatise and the beginning of the fifth treatise of Avicenna's *Kitāb al-Nafs* (*Book of the Soul*). In particular, Alpina detects the reason why al-Ġūzġānī inserted this excerpt in this precise place of the *Book of the Soul* in the necessity of providing the brief outline of Avicenna's theory of emotions in *Nafs*, IV.4 with its medical background. Furthermore, Alpina provides a close scrutiny of the Arabic textual tradition of this insertion, and investigates its relation to the Latin manuscript tradition preserving the *Book of the Soul*, by which the insertion is unanimously attested.

The contribution by Aafke M. I. van Oppenraay provides an overview of the *status quaestionis* and the current research agenda of Michael Scot's Arabic-Latin translation of Avicenna's *Kitāb al-Ḥayawān* (*Book of Animals*, *Liber de animalibus* in the Latin translation), the eighth section of the natural philosophy of the *Šifā'*. Firstly, the author summarizes what has been already ascertained about this work and its author. Secondly, she offers a survey of the manuscript tradition and dissemination of this translation, and provides the proemium of the Latin translation as a sample of her forthcoming edition.

Rüdiger Arnzen analyzes the phenomenon of double translations (*leçons doubles*) in medieval Graeco-Latin and Arabic-Latin translations. In the first part of the article, the author deals in general with the nature and the correct way of understanding this phenomenon in Arabic-Latin translations, as well as with recent attempts at historical and philological explanations of its emergence. In the second part, he examines various types of double translations in the Latin

version of Avicenna's *Ilāhiyyāt* ([*Science of*] *Divine Things*), i.e. the metaphysics of the *Šifā'*, and provides some observations on their different causes.

The article by Alfonso Quartucci focuses on the original notion of 'first subject of science', which Avicenna elaborated in connection with the epistemological structure of metaphysics, and on its deep influence on Latin medieval philosophy. In the first part of the article, the author determines the exact meaning of the expression *al-mawḏū' al-awwal* (*first subject*) as it is employed in *Ilāhiyyāt*, I.1-2. In the second part, the Latin reception of the Avicennian notion is investigated by taking into account the Latin translation of Avicenna's work in order to explain how and to which extent Latin authors could and actually did understand the Avicennian notion of 'first subject'.

Amos Bertolacci analyzes the evidence available in Arabic sources that supports the hypothesis according to which the medieval Latin translation of the metaphysics of Avicenna's *Šifā'* is rooted in its Arabic background when it conveys an account of treatise V of the work (called 'Versio Latina') alternative to the one that can be found in the majority of codices and in current printings ('Versio Vulgata'). The author argues that the 'Versio Latina' is more ancient than the 'Versio Vulgata', and conclusively discusses the main issues that future research is asked to address in order to corroborate the hypothesis of a multiple recension of the *Ilāhiyyāt*.

Nicola Polloni devotes his article to the analysis of the peculiarities of Dominicus Gundissalinus' reading and use of Avicenna's writings in his original works. This article points out that Gundissalinus grounds his own speculation upon a structural bond with key-doctrines of the Persian philosopher as expressed in the Latin translation of the *Šifā'*. In particular, he stresses that Avicenna's psychology, epistemology, and metaphysics provide Gundissalinus with a different set of answers to at least two main questions, i.e. the problem of creatural existence and cosmological causation, and the necessity of a new system of knowledge.

Lastly, the article by Ivana Panzeca presents a preliminary study of the attested Persian translations of the metaphysics of the *Šifā'*, which have been carried out within the context of the Safavid cultural Renaissance (X/XVI-XII/XVIII).

The type of analysis proposed in the single articles is uneven, depending on the availability, or lack thereof, of a more or less trustworthy text of the translations under consideration in the critical editions of the Avicenna Latinus series, or in Renaissance printings like the one published in Venice in 1508 and later publications, and on the ensuing richness or scarceness of previous scholarly research. Thus, some contributions can rely on a greater amount of previous studies, which they evaluate critically or update with new discoveries, whereas others are real pioneering incursions into almost unexplored research avenues.

Likewise, some articles face the Latin translation of a particular section of the *Šifā* 'ex professo', whereas others use the Latin translation as evidential basis to unravel philological or doctrinal issues. The volume remains significantly 'open' at both its ends — with an initial investigation of the literary and philosophical background of the translation of the *Madḥal*, and a final analysis of the impact of Avicenna's philosophy on the original works of one of its Latin translators and earliest recipients (Gundissalinus), as well as of the first step of the circulation of his metaphysics in Iranian culture by means of Persian translations — to signify its nature of starting-point of a wider and deeper research.

We wish conclusively to thank the participants at the conference whose papers are not published here: Ghorban 'Ali Pourmarjan (former Director of the Istituto Culturale dell'Iran in Rome), and the professors Charles Burnett, Dag N. Hasse, Jean-Marc Mandosio, and Marwan Rashed. We are also grateful to the scholars who kindly accepted to chair the conference sessions, especially Maroun Aouad, and Mohammad J. Esmaeili. Our gratitude goes also to Maria Scermino and to the staff of the Scuola Normale Superiore in Pisa for their help in the organization of the meeting, and to Mario Bertagna for the editing of the volume and the preparation of the indices. A very special thought goes to the regretted Mauro Zonta, who had kindly accepted to publish in the present issue a contribution on the Hebrew translations of the *Šifā*'. A specimen of Zonta's outstanding scholarship, which will continue to nourish our understanding of the field of Arabic-Islamic and Hebrew-Jewish studies for the decades to come, would have greatly enriched the content of the present volume and substantially raised its level. Events have tragically decided otherwise: our sincere esteem and deep gratitude to Mauro, together with a profound sense of loss, remain.

AMOS BERTOLACCI

TOMMASO ALPINA

Scuola Normale Superiore

FRANÇOISE HUDRY

La traduction latine de la *Logica Avicennae* et son auteur

Ayant longtemps travaillé à l'édition critique de la *Logica Avicennae*¹ que m'avaient confiée Marie-Thérèse d'Alverny et Simone Van Riet, je voudrais examiner la place et la qualité de son traducteur arabo-latin appelé Avendauth.

La *Logica Avicennae* est la traduction latine faite au XII^e siècle à Tolède du commentaire du philosophe arabe Avicenne (ca.980-1037) sur l'*Isagoge* de Porphyre, philosophe de langue grecque du III^e siècle. Ce texte arabe (*al-Madḥal*) est le premier de l'encyclopédie d'Avicenne intitulée *Kitāb al-Šifā'* ou *Livre de la Guérison* (en anglais *The Cure*). Il en ouvre la section logique (*al-Mantiq*).

Au milieu du XII^e siècle naquit à Tolède le projet de faire une traduction latine de cette encyclopédie philosophique arabe, du *Šifā'* entier. On en trouve la proposition sous la plume de ce personnage appelé chez les Latins Avendauth, qui se qualifie spontanément de *Israelita* dans la brève missive offrant la traduction de la *Logica* à l'archevêque de Tolède, puis de *Israelita philosophus* dans la dédicace de la traduction du *De anima* d'Avicenne exécutée plus tard conjointement avec Dominique Gundisalvi².

L'intéressante suggestion, dès 1954³, de Marie-Thérèse d'Alverny de voir dans ce personnage le philosophe juif de langue arabe contemporain, Abraham Ibn Daud ou Ben David Halevi (c.1110-1180), trouve enfin aujourd'hui une confirmation scientifiquement valable dans le domaine des mathématiques pratiques de langue arabe étudiées à la cathédrale de Tolède.

Gad Freudenthal, dans un article récapitulatif, passe en revue les progrès accomplis ces dernières années jusqu'à ce « decisive progress, allowing us to consider the identity as definitely demonstrated »⁴. En s'appuyant sur les

¹ *Logica Avicennae*. Traduction latine médiévale de AVICENNE, *aš-Šifā', al-Madkhal*. Édition critique annotée accompagnée d'une recherche des sources grecques, par F. HUDRY, Paris, Éditions Vrin, coll. Sic et Non (à paraître).

² Voir les textes *infra*, pp. 3 et 5.

³ M.-T. D'ALVERNY, *Avendauth?*, in *Homenaje a Millas-Vallcrosa*, I, Consejo Superior de Investigaciones Científicas, Barcelona 1954, pp. 19-43, repr. in EAD., *Avicenne en Occident*, Vrin, Paris 1993, n°VIII.

⁴ G. FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus and Practical Mathematics in Mid-Twelfth Century Toledo*, « Aleph », 16/1, 2016, pp. 61-106 (104).

résultats ainsi recueillis et approuvés⁵, on peut donc s'autoriser aujourd'hui à considérer l'identité des deux personnages Avendauth et Abraham Ibn Daud comme reconnue et acquise.

Abraham Ibn Daud vécut d'abord à Cordoue. Contraint de quitter la ville avec ses coreligionnaires à l'arrivée en Andalousie de la nouvelle dynastie almohade hostile aux Juifs (1148), Ibn Daud suivit leur exode poussé jusqu'à Tolède⁶. Il nous en a laissé le récit dans son ouvrage *Sefer ha-Qabbalah* ou *Livre de la tradition*⁷. Il écrivit un autre ouvrage historique, une chronique d'histoire romaine intitulée *Zikhron Divrey Romi*⁸ qui comprend un survol d'histoire romaine complété par plusieurs considérations sur l'histoire des Goths en Espagne. L'intention de l'auteur semble avoir été de renseigner la communauté juive vivant en pays chrétien sur l'histoire et la tradition de son environnement. Ce qui pourrait indiquer, comme l'a suggéré Shlomo Pinès⁹, que Ibn Daud utilisa des chroniques historiques en latin ou en langue romane espagnole, ou les deux, et qu'il s'intéressait à son environnement chrétien.

Désormais installé à Tolède, où il avait reçu des Latins le nom d'Avendauth, il chercha un mécène à qui présenter son projet d'une traduction latine de l'encyclopédie d'Avicenne *Kitāb al-Šifā'*.

Nous examinerons successivement Avendauth initiateur de la traduction du *Šifā'* et Avendauth traducteur de la *Logica Avicennae*.

⁵ Dans l'article cité *supra* sont rappelés notamment, concernant Avendauth, les travaux de C. BURNETT, *Arabic into Latin in the Middle Ages. The Translators and their Intellectual and Social Context*, Variorum, Ashgate 2009, en particulier : *The Coherence of the Arabic-Latin Translation Programme in Toledo in the Twelfth Century*, « Science in Context », 14, 2001, pp. 249-288 [Article VII] ; Id., *Translating from Arabic into Latin: Theory, Practice, and Criticism*, in S. G. LOFTS, P. W. ROSEMAN eds., *Éditer, traduire, interpréter : Essais de méthodologie philosophique*, Peeters, Louvain 1997 ; M. ZONTA, *The Jewish Mediation in the Transmission of Arabo-Islamic Science and Philosophy to the Latin Middle Ages. Historical Overview and Perspective of Research*, in A. SPEER, L. WEGENER, eds., *Wissen über Grenzen : Arabisches Wissen und lateinisches Mittelalter*, Walter de Gruyter, Berlin 2006, pp. 89-105 ; A. BERTOLACCI, *A Community of Translators: The Latin Medieval Versions of Avicenna's Book of the Cure*, in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*, Brepols, Turnhout 2011 (Europa Sacra, vol. 9), pp. 37-54 ; Y. SCHWARTZ, *Die Rezeption philosophischer Schriften aus dem Judentum*, in P. SCHULTHEISS ed., *Grundriss der Geschichte der Philosophie. Reihe Mittelalter. 13. Jahrhundert* (à paraître).

⁶ R. FONTAINE, *Abraham Ibn Daud*, in E. N. ZALTA ed., *The Stanford Encyclopedia of Philosophy* (Spring 2015 Ed.), URL=<http://plato.stanford.edu/archives/spr2015/entries/abraham-daud/>.

⁷ G. D. COHEN, *A critical Edition with a Translation and Notes of The Book of Tradition (Sefer Ha-Qabbalah) by Abraham ibn Daud*, The Jewish Publication Society of America, Philadelphia 1967, pp. 96-99. Je remercie Madame Colette Sirat de m'avoir communiqué ce texte.

⁸ K. VEHLow, *Abraham Ibn Daud's Dorot 'Olam (Generations of the Ages). A Critical Edition and Translation of Zikhron Divrey Romi, Divrey Malkhey Isra'el and the Midrash on Zechariah*, Brill, Leiden - Boston 2013.

⁹ S. PINES, *Scholasticism after Thomas Aquinas and the Teachings of Hasdai Crescas and his Predecessors*, « Proceedings of the Israel Academy of Sciences and Humanities », vol. I, n°10, Israel Academy of Sciences and Humanities, Jerusalem 1967, pp. 98-99. Je remercie vivement Madame Colette Sirat de m'avoir également communiqué ce texte.

I. AVENDAETH INITIATEUR DE LA TRADUCTION DU *ŠIFĀ*¹⁰

Il faut reprendre le texte de la courte lettre latine, sans adresse, qui se trouve placée en tête de la traduction de la *Logica Avicennae* :

« Verba Avendeuth Israelitae¹⁰

Studiosam animam vestram ad appetitum translationis libri Avicennae quem Asschiphe, id est Sufficientiam, nuncupavit, invitare cupiens, quaedam capitula intentionum universalium, quae negotio logico praeposuit in principio istius libri, Dominationi vestrae curavi in latinum eloquium ex arabico transmutare. Tamen, quia in plerisque codicibus in principio libri totius prologus cuiusdam discipuli ipsius invenitur appositus, ex quo plura colligi possunt tam de vita quam de scriptis praefati viri, ipsum quoque transfundere duxi cum capitulis memoratis. Qui sic incipit... ».

« Paroles de l'Israélite Avendauth

Désireux d'éveiller votre âme zélée à l'envie d'une traduction du livre d'Avicenne qu'il a intitulé *al-Šifā*, c'est-à-dire *Sufficientia*, j'ai pris soin de convertir d'arabe en langue latine pour votre Seigneurie, certains chapitres sur les notions des universaux qu'il a placés en tête de la section logique, au commencement de cet ouvrage. Cependant, puisque dans la plupart des manuscrits, on trouve au début de l'ensemble de l'ouvrage le prologue d'un disciple qui permet de recueillir plusieurs renseignements tant sur la vie que sur les écrits de cet auteur, j'ai pensé le faire passer, lui aussi, d'une langue dans l'autre avec les chapitres mentionnés. Il commence ainsi... ».

En relisant ce court texte, on constate qu'il n'est ni une dédicace à l'archevêque de Tolède ni un prologue du *Šifā* puisqu'il n'a pas Avicenne pour auteur et qu'il n'envisage pas globalement le contenu de l'ouvrage.

C'est une simple lettre à « votre Seigneurie » pour lui présenter à titre d'échantillon la traduction latine d'un texte du *Šifā* afin de lui montrer l'intérêt qu'en offrirait une traduction complète. Les mots *quaedam capitula intentionum universalium, quae negotio logico praeposuit in principio istius libri*, « certains chapitres sur les notions des universaux qu'il <Avicenne> a placés en tête de

¹⁰ D'après le ms. Città del Vaticano, Vaticanus latinus 4428 (U), fol. 1r. Le texte est aussi conservé dans le ms. Brugge, Stedelijke Openbare Bibliotheek 510 (B), fol. 37v, base de l'édition de A. BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon*, « Revue néoscholastique de philosophie », 36, 1934, pp. 308-320 (314-319), repr. in *Études d'histoire des sciences et de la philosophie du Moyen-Age*, Zakład Narodowy Imienia Ossolinskich, Wrocław - Warszawa - Kraków 1970 (Studia copernicana 1), pp. 89-101 (95-98). Le titre trop rapide de l'édition Birkenmajer a nui à l'identification précise du texte.

la section logique, au commencement de cet ouvrage <le *Šifā*>» désignent le commentaire du philosophe arabe sur l'*Isagoge* de Porphyre. Ils ne représentent qu'un quinzième environ de sa *Logique* et sont distincts du prologue du disciple dont parle ensuite Avendauth. Il n'y a plus à hésiter sur le sens du mot *universalialia*, puisque dans la traduction même d'Avicenne il est utilisé pour désigner l'*Isagoge* de Porphyre: «Hae sunt communitates et differentiae, et vulgatae, quas posuit qui de hiis quinque universalibus primus librum fecit». Telles sont les ressemblances et différences, d'ailleurs bien connues, qu'a posées celui qui le premier fit un livre sur ces cinq universaux (*Logica Avicennae* II, 3).

Quand Avendauth écrit cette lettre, il distingue bien les trois niveaux de textes: les *capitula*, c'est-à-dire le commentaire de l'*Isagoge* proprement dit (*al-Madḥal*) qui se situe au début de la section logique (*negotium logicum*) ou *al-Mantiq*, laquelle se situe elle-même au début de l'ouvrage encyclopédique *al-Šifā*¹¹. Le fait qu'il parle de *capitula* au pluriel, repris à la fin du texte par *cum capitulis memoratis*, indique bien qu'il s'agit de l'ensemble de l'*Isagoge* commentée d'Avicenne, puisque l'ouvrage traite en plusieurs chapitres des différents universaux.

Avendauth joint à son envoi la traduction des souvenirs du disciple d'Avicenne Abū 'Ubayd 'Abd al-Wāhid ibn Muḥammad al-Ġūzġānī sur sa vie avec son maître (*Verba discipuli*), qui se trouve en tête de l'encyclopédie complète «dans la plupart des manuscrits» arabes, selon son expression.

Le texte d'Avicenne lui-même intitulé *Verba Avicennae*, qui porte sur la succession de ses écrits, est la traduction du chapitre arabe I-1 de la *Logica*. Avendauth ne le mentionne pas spécialement, puisqu'il fait partie des *capitula* de *al-Madḥal* bien qu'il ait été rédigé plus tard par Avicenne¹². Il constitue un complément à la biographie du maître. Avendauth avait ainsi réuni un dossier fourni sur Avicenne afin de renseigner son interlocuteur. Nous l'appellerons «le dossier d'Avendauth».

En raison des mots de la lettre *Dominationi vestrae* «pour votre Seigneurie», le destinataire en est l'archevêque de Tolède Jean de Castelmoron (1152-1166), auquel fut présentée, quelque temps après, la traduction du *De anima* d'Avicenne par le même Avendauth associé à Dominique Gundisalvi. Il faut prendre aussi en considération le ton de cette dédicace et les termes différents utilisés en cette seconde occasion¹³:

¹¹ IBN SİNĀ, *al-Šifā', al-Mantiq, al-Madḥal*, éd. I. B. MADKŪR, G. Š. QANAWĀTĪ, M. AL-ḤUDAYRĪ, A. F. AL-AHWĀNĪ, Al-Maṭba'a al-amiriyya, Le Caire 1952.

¹² D. GUTAS, *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*. Second, Revised and Enlarged Edition Including an Inventory of Avicenna's Authentic Works, Brill, Leiden - Boston 2014, pp. 41-42.

¹³ Simone Van Riet a bien remarqué la différence de ton et de vocabulaire entre ce texte et les *Verba Avendauth* de la *Logica*. Mais elle considère ceux-ci comme une autre dédicace, *Avicenna Latinus. Liber de Anima seu Sextus de naturalibus*, I-II-III, éd. S. VAN RIET, Peeters - Brill, Louvain-Leiden 1972, p. 101*, n. 33. L'édition de la dédicace du *De anima* suit dans cette édition, p. 103*-104* et p. 3-4; D'ALVERNY, *Avendauth?* cit., pp. 33-34; C. S. F. BURNETT, *Some Comments on the Translating of Works from Arabic into Latin in the Mid-Twelfth Century*, «Miscellanea Mediaevalia», 17, 1985, pp. 165-167.

« Iohanni reverentissimo Toletanae sedis archiepiscopo et Yspaniarum primati, Avendeuth israelita philosophus gratum debitae servitutis obsequium <...> iussum vestrum, Domine, de transferendo libro Avicennae philosophi *De anima* effectui mancipare curavi, quatinus vestro munere et nostro labore Latinis fieret certum... ».

« À Jean, révérendissime archevêque du siège de Tolède et primat des Espagnes, le philosophe juif Avendauth, en hommage reconnaissant de soumission due, <...> j'ai pris soin, Monseigneur, de transmettre pour effet votre ordre concernant la traduction du livre du philosophe Avicenne *Sur l'âme*, afin que, grâce à votre don et à notre labeur, il devienne clair pour les Latins... ».

Comme il est normal pour la présentation d'un ouvrage achevé, le ton est ici officiel, l'adresse solennelle et la conclusion exprimée en termes de mission accomplie :

« Habetis ergo librum, vobis praecipiente et me singula verba vulgariter proferente et Dominico archidiacono singula in latinum convertente, ex arabico translatum ».

« Voici donc le livre traduit de l'arabe, grâce à vous qui le commanditez, à moi qui le prononce mot à mot à la façon populaire, et à l'archidiacre Dominique qui le convertit mot à mot en latin ».

On a beaucoup répété ces précisions données par Avendauth sur la méthode conjointe suivie par Dominique Gundisalvi et lui-même pour traduire le *De anima* d'Avicenne. À force de les répéter, on a fini par ne voir en Avendauth qu'un modeste subalterne donnant au latiniste la forme du mot en arabe parlé (*vulgariter proferente*) pour que celui-ci trouve le mot latin correspondant.

Dans la lettre que nous avons lue au début (*Verba Avendeuth Israelitae*), Avendauth dit pourtant qu'il a traduit lui-même non seulement les chapitres sur les universaux, c'est-à-dire le commentaire de l'*Isagoge*, mais aussi les prologues en arabe que donnent les manuscrits. Il faut remarquer en effet, avec Silvia Di Vincenzo¹⁴, la différence entre *curavi in latinum eloquium ex arabico transmutare*, « j'ai pris soin de convertir d'arabe en langue latine » et l'expression utilisée dans la dédicace du *De anima* : *effectui mancipare curavi*, « j'ai pris soin de transmettre pour effet », qui indique clairement le recours à un tiers, en l'occurrence Dominique Gundisalvi¹⁵. Comme l'a indiqué Marie-Thérèse d'Alverny, Avendauth joue ici

¹⁴ S. DI VINCENZO, *Avicenna's Isagoge*, Chap. I, 12, *De universalibus: Some Observations on the Latin Translation*, « Oriens », 40, 2012, pp. 438-439, n. 3.

¹⁵ N. POLLONI, *Elementi per una biografia di Dominicus Gundisalvi*, « Archives d'Histoire Doctrinale et Littéraire du Moyen-Âge » (AHDLM), 82, 2015, pp. 7-22 (18).

le rôle principal alors que « le latiniste <...> est présenté comme un acolyte »¹⁶. Et elle souligne ailleurs qu'il est rare que l'arabisant prenne la première place dans une équipe de traducteurs, ce qui montre l'importance ici du personnage¹⁷. Cependant, la recherche latine n'a pas cherché à le connaître.

C'est ce même philosophe israélite Avendauth¹⁸ qui s'est adressé précédemment de sa propre autorité au même archevêque, sur un ton beaucoup plus simple et plus personnel, se présentant simplement comme *Avendauth Israelita* et prenant la liberté (*invitare cupiens...*) de l'encourager à vouloir une traduction latine du *Šifā'* (*ad appetitum translationis*), en lui parlant du contenu des manuscrits, en lui présentant un échantillon de l'ouvrage¹⁹. Avendauth/Ibn Daud a choisi dans la *Logique* qui ouvre l'ouvrage encyclopédique du philosophe arabe, le commentaire de l'*Isagoge* de Porphyre bien connue des Latins grâce à Boèce. Les universaux étaient un sujet de prédilection des écoles latines, auquel s'intéressait également Ibn Daud. Il en traite lui-même au début de son ouvrage *ha-Emunah ha-Ramah* ou *La foi sublime* de 1160-1161²⁰.

Certes, l'interprétation traditionnelle dénie à Avendauth toute connaissance du latin. Mais alors pourquoi Avendauth dit-il dans les *Verba Avendeuth Israelitae* que nous venons de lire que c'est lui qui a traduit de l'arabe en latin (*curavi in latinum eloquium ex arabico transmutare*) à la fois la *Logica* et le prologue du disciple (*ipsum quoque transfundere duxi cum capitulis memoratis*) ? Pour essayer de comprendre, il faut ici prendre ces paroles au sérieux et considérer les faits.

La *Logica Avicennae* nous permet d'examiner deux sortes de textes que les manuscrits nous disent traduits par Avendauth : les textes biographiques donc narratifs (*Verba discipuli* et *Verba Avicennae*) présentés par les *Verba Avendeuth* cités²¹ et un texte philosophique précis : le chapitre I-12 arabe, intitulé en latin *De universalibus*, que quatre manuscrits disent traduit par Avendauth et tiré de la *Logique* (par ex. *translatus a Buen Deut de libro Avicenne de loyca*, ms. D), et un autre qui l'attribue à Avendauth à partir de la *Métaphysique* I. V d'Avicenne (*liber Avendeuth de universalibus assumptus ex quinto Methaphysice* (sic) Avicenne, ms. O).

¹⁶ M.-T. D'ALVERNY, *Les traductions à deux interprètes, d'arabe en langue vernaculaire et de langue vernaculaire en latin*, in *Traduction et traducteurs au Moyen Âge*. Colloques internationaux du CNRS, IRHT 26-28 mai 1986. Éditions du CNRS, Paris 1989, pp. 193-206 (195), reproduit dans EAD., *La transmission des textes philosophiques et scientifiques au Moyen Âge*, ed. C. BURNETT, Variozum, Ashgate 1994, n° III.

¹⁷ M.-T. D'ALVERNY, *Les traductions d'Avicenne (Moyen Âge et Renaissance)*, « Problemi attuali di Scienza e di Cultura, Quaderno n°40 (Avicenna nella storia della cultura medievale) », Rome 1957, pp. 71-87, repr. in EAD., *Avicenne en Occident* cit., n°v, p. 73.

¹⁸ Sur le rôle déterminant d'Avendauth, BERTOLACCI, *A Community of Translators* cit., pp. 52-54.

¹⁹ FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus* cit., p. 70.

²⁰ R. (alias T. A. M.) FONTAINE, *In Defence of Judaism: Abraham Ibn Daoud. Sources and Structure of ha-Emunah ha-Ramah*, Van Gorcum, Assen 1990 (*Studia Semitica Neerlandica*), pp. 13-20. L'auteur souligne que Ibn Daud et Gundisalvi se sont intéressés aux mêmes textes, *ibid.*, pp. 262-263.

²¹ Cf. *supra*, p. 3.

II. 1. AVENDAETH TRADUCTEUR DES TEXTES NARRATIFS (*VERBA DISCIPULI* ET *VERBA AVICENNAE*)

Dans l'hypothèse où Avendauth/Ibn Daud aurait traduit lui-même ces textes arabes en latin, il faut observer les traits principaux de ces traductions. Car on est frappé à leur lecture à la fois par un vocabulaire recherché, inhabituel mais bien trouvé, et par des maladresses.

La tradition manuscrite de la *Logica Avicennae* nous montre qu'il n'y eut que deux manuscrits connus de l'ensemble du « dossier d'Avendauth » : Città del Vaticano, Vaticanus latinus 4428 (U), fol. 1r et Brugge, Stedelijke Openbare Bibliotheek 510 (B), fol. 37v, tous deux du XIII^es. Eux seuls nous ont transmis les textes préliminaires que sont les *Verba Avendeuth Israelitae* écrits directement en latin, et les *Verba discipuli Avicennae* et *Verba Avicennae*, traduits de l'arabe²². Malheureusement les circonstances codicologiques de leur transcription ont suscité bien des difficultés qui ont nui à l'importance de ces deux manuscrits²³.

a) L'intitulé d'Avicenne

En considérant la traduction des deux premiers textes arabes, on note dès le début le soin du traducteur dans le choix des mots latins. Ainsi, le titre usuel d'Avicenne *al-šayḥ al-ra'īs* est exactement rendu dans les deux textes par *grandaevus princeps*, avec le sens d'autorité plus que d'âge donné au mot 'ancien', *al-šayḥ*. On ne retrouve pas, semble-t-il, cet adjectif *grandaevus* dans les autres intitulés d'Avicenne²⁴. L'adjectif n'est pas rare en latin médiéval, mais il est ici particulièrement bien choisi. *Grandaevus*, chargé d'ans, est en effet un mot noble appliqué par Virgile dans les *Géorgiques* à l'antique dieu de la mer Nérée²⁵. Celui-ci, contrairement à bien des dieux antiques dont on souligne volontiers les méfaits, a une réputation de sagesse et de justice. Il réunit donc, comme il convient, les notions d'ancienneté et de respect. Dans sa traduction du *Canon* d'Avicenne, Gérard de Crémone utilise le mot banal *senex*, vieillard²⁶.

²² Edition des trois textes d'après B par BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon* cit., pp. 308-320.

²³ Cf. « La Tradition manuscrite de la *Logica Avicennae* » dans l'édition critique de la *Logica Avicennae* à paraître.

²⁴ A. BERTOLACCI, *Albert the Great and the Preface of Avicenna's Kitāb al-Šifā'*, in J. JANSSENS, D. DE SMET eds., *Avicenna and his Heritage. Acts of the International Colloquium*, Leuven - Louvain-la-Neuve, September 8-11, 1999, Leuven University Press, Leuven 2002, p. 151, n. 59.

²⁵ VIRGILE, *Georg.* IV, 392.

²⁶ M.-T. D'ALVERNY, *Survivance et renaissance d'Avicenne à Venise et à Padoue*, in A. PERTUSI ed., *Venezia e l'Oriente fra tardo Medioevo e Rinascimento*, Sansoni, Florence 1966, p. 80, repr. dans *Avicenne en Occident* cit., n° xv.

b) Les *Verba discipuli Avicennae*²⁷

Dans les *Verba discipuli Avicennae* (§1)²⁸, le disciple parlant de la grande réputation d'Avicenne vu son âge, précise qu'il n'avait pas encore dépassé l'âge de la jeunesse : *et iuvenis existens qui nundum aetatem expleverat iuventutis*. Mais le traducteur s'adapte à ses lecteurs latins en ajoutant l'usage latin selon lequel le terme *iuvenis* s'applique jusqu'à 40 ans²⁹ : *utpote qui nundum annum attigerat vitae* XL, « comme il est naturel à quelqu'un qui n'avait pas encore atteint l'année de ses 40 ans », alors que le texte arabe ne parle que de deux décennies³⁰.

Quand le disciple rapporte les difficultés d'Avicenne avec ses manuscrits, perdus, dispersés ou pillés, on observe un recours fréquent du traducteur au vocabulaire de Cicéron (§2). Les emprunts ne portent pas seulement sur des mots généraux, comme *dissipatio*, dispersion, *perturbatio*, désordre, mais aussi sur ceux que l'on trouve plus particulièrement dans les discours de Cicéron *In Verrem*, contre Verrès le pillleur de la Sicile, comme *direptio*, pillage³¹ ou des mots secondaires, comme *usquequaque*, en tout lieu, *callide*, habilement³² etc.

Le mot rare *taediosus* que l'on voit ici (*quae utique occupatio mihi dampnosa exitit et etiam ei non minime taediosa*)³³ apparaît dans les *Confessiones* IV, 7, 12 de s. Augustin. Nous verrons d'autres emprunts à la même partie de cet ouvrage.

Le traducteur ne veut pas encombrer son texte destiné aux Latins avec ce qui est spécifique à l'arabe, comme les invocations pieuses. La formule arabe signifiant la mort du roi Šams al-Dawla, qui changea les plans d'Avicenne, est remplacée par l'évocation latine de la roue de la Fortune : *Nam rota Fortunae revoluta regem illum e medio evocavit* (§4), « car la roue de la Fortune ayant tourné rappela ce roi du milieu du monde », image du discours de Cicéron *In Pisonem* où elle ne s'applique pas à la mort³⁴. Les mots *occultatio*, action de se cacher, et *moleste ferentes*, supportant avec peine (§5), renvoient aux *Lettres à Atticus* du même Cicéron³⁵.

Dans la phrase suivante, le mot inhabituel *ingeniatus* surprend. Mais on le retrouve, accompagné comme ici d'un adverbe (ici *callide*, de façon rusée, habile, chez Plaute *lepide*, de façon aimable) dans le *Miles gloriosus*³⁶, pour décrire le naturel d'un personnage.

²⁷ Ed. BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon cit.*, pp. 314-317.

²⁸ Par commodité, les numéros des paragraphes sont repris de la traduction anglaise de ces textes à partir de l'arabe dans GUTAS, *Avicenna cit. supra* n. 12, pp. 29-34.

²⁹ *Thesaurus linguae latinae*, VII, 2, Leipzig 1956, col. 734.

³⁰ GUTAS, *Avicenna cit.*, p. 30, note c.

³¹ CICÉRON, *In Verr.* 4, 111, 115 etc.

³² CICÉRON, *In Verr.* 5, 10 ; *callide*, *passim*.

³³ GUTAS, *Avicenna cit.*, p. 31, note i. Cette phrase diffère du texte arabe.

³⁴ CICÉRON, *In Pisonem* 10, 22.

³⁵ CICÉRON, *Epistulae ad Atticum*, IX, 13, 5 et XIII, 22, 4.

³⁶ PLAUTE, *Miles gloriosus*, 731.

Dans la phrase « eius detentores ad cor redeunt absolverunt ipsum » (§5), l'expression *ad cor redeunt*, absente du texte arabe, retient particulièrement l'attention. Elle vient en effet originellement de la traduction latine de la Bible, en Isaïe, 46, 8 : *Redite, praevaricatores, ad cor*, verset qui se trouve cité par s. Augustin dans ses *Confessiones* (IV, 12, 18). Elle répond ainsi tout à fait à la question posée par le savant Shlomo Pinès³⁷ à propos de Ibn Daud : si l'on s'accorde pour attribuer à l'influence d'Avendauth sur Gundisalvi les ressemblances entre les écrits de ces deux auteurs, ne peut-on trouver aussi à l'inverse dans les écrits d'Abraham Ibn Daud des recours aux écrits chrétiens ?

On relève aussi *suffultus*, soutenu (§7 « solo sui cordis repositoio suffultus »), mot du *De natura rerum* de Lucrèce³⁸, qui sera repris au chapitre I-2 (3) de la *Logica. Repositorium*, coffre, armoire, est en revanche un mot médiéval.

c) Les *Verba Avicennae* (I-1)³⁹

Dans les *Verba Avicennae* (§1), l'expression *patula falsitas*, l'erreur largement étalée, frappe par la présence du mot *patulus* que l'on connaît au premier vers des *Bucoliques* de Virgile, où il désigne la ramure largement étalée d'un hêtre à l'ombre duquel se repose le berger Tityre. Dans le *De oratore* de Cicéron, le mot est aussi appliqué à un arbre⁴⁰. Ici, il est joint à *falsitas*, qu'Augustin, au même livre des *Confessiones* (IV, 16, 29), oppose à *veritas* à propos de l'influence sur lui des *Catégories* d'Aristote.

Ce changement de registre suggère une maladresse, mais en réalité l'emploi du mot *patulus* réservé aux arbres entre dans la métaphore suivie par Avicenne présentant son ouvrage comme un arbre, avec dans la suite du texte, la *medulla*, les *radices*, la *spatiosa ramorum explicatio* et la *protensio radicum*. À ce propos, on constate une nette divergence entre le texte d'Avicenne transmis par les manuscrits de la *Logica Avicennae* et celui de l'édition officielle du Caire, divergence qui demande une recherche particulière⁴¹.

Comme pour *grandaevus*, on observe chez le traducteur Avendauth un vif souci de l'exactitude des mots choisis.

Plus loin (§2), dans *in scientia logicae cui haec cordi fuerit*, « dans la science de la logique, pour qui l'aura eue à cœur », *cordi esse alicui* est une expression latine de Cicéron tout à fait classique⁴².

³⁷ PINES, *Scholasticism after Thomas Aquinas* cit., pp. 99-100 et 101.

³⁸ LUCRÈCE, *De natura rerum*, IV, 427 et 867.

³⁹ Ed. BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon* cit. n. 10, pp. 317-319.

⁴⁰ CICÉRON, *De oratore*, 1, 28 (platanus, platane) ; VIRGILE, *Bucoliques* I, 1 (fagus, hêtre).

⁴¹ S. DI VINCENZO, *Is there a versio vulgata of Avicenna's Kitāb al-Šifā' ? On the hypothesis of a double recension of Kitāb al-Madḥal*, dans ce volume.

⁴² CICÉRON, *Orator*, 53 ; *Epistula ad Atticum* V, 3, 3 etc. Manuscrits donnant ce texte dans GUTAS, *Avicenna* cit., p. 43, note e ; Silvia Di Vincenzo y ajoute le manuscrit Leiden Or. 4, f. 2, DI VINCENZO, *Avicenna's Isagoge, Chap. I, 12, De universalibus* cit., p. 451, n. 35.

Mais, à la fin de ce passage des *Verba Avicennae* (§4), le latin ne correspond plus du tout à l'arabe :

« ... secundum id quod exigit opinio pura, non observando limitem aut partem ad quam determinant participes in arte, neque conformidando a suarum ictibus lancearum hoc quod fuit in aliis formidatum »,

(traduction française) « ... selon ce qu'exige une opinion sincère, qui ne tient pas compte de la voie ni du parti que suivent les collègues dans la discipline, et ne redoute pas des coups de leurs lances ce qui le fut en d'autres cas »,

alors que l'arabe dit (traduction anglaise)⁴³ :

« ... as required by an unbiased view which neither takes into account the views of colleagues in the discipline, nor takes precautions here against creating schisms among them as is done elsewhere »⁴⁴.

Tandis que l'arabe parle de précautions contre la création de schismes parmi les collègues, le latin parle de crainte des coups de leurs lances. Il y a là une évidente transposition du traducteur arabo-latin Avendauth. Avicenne parle de ne pas éviter ici de créer des schismes parmi les collègues, comme on le fait ailleurs. Avendauth prend à dessein une autre image, car pour les Latins « créer un schisme » est une énormité scandaleuse qui se situe au plan religieux. L'analogie avec les tournois de chevaliers du XII^e siècle européen ramènera la question à un niveau plus ordinaire. Le début de l'*Âne d'or* d'Apulée fournit l'idée de crainte (*formido*) associée à l'image de la lance (*lancea*) :

« Denique mihi quoque non parvam incussisti sollicitudinem, immo vero formidinem, iniecto non scrupulo sed lancea ».

« au point qu'à moi aussi tu as inspiré une forte inquiétude, pour ne pas dire de la crainte, (...) comme si tu m'avais enfoncé non une écharde, mais la pointe d'une lance »⁴⁵.

Par cette image, le traducteur suggère qu'Avicenne ne prend pas ces dissensions bien au sérieux, mais plutôt comme un jeu. L'usage des analogies est

⁴³ GUTAS, *Avicenna* cit., p. 44, §4. Texte arabe et traduction anglaise dans BERTOLACCI, *Albert the Great and the Preface* cit., p. 137 et n. 19.

⁴⁴ GUTAS, *Avicenna* cit., p. 44 et n. 5.

⁴⁵ APULÉE, *Métamorphoses* ou l'*Âne d'or*, I, 11.

de fait un trait de style de Ibn Daud⁴⁶. Le texte latin de ces prologues du *Šifā'* a été lu et cité à plusieurs reprises par le philosophe anglais Roger Bacon (ca.1214-1294) qui les considérait comme l'exacte pensée d'Avicenne⁴⁷. Le fait que Roger Bacon reprenne si souvent l'analogie des *ictus lancearum contradicentium* montre qu'il avait bien sous les yeux la traduction d'Avendauth/Ibn Daud puisque c'est lui qui y a introduit cette analogie du tournoi⁴⁸.

En avançant dans le texte, on trouve ensuite un point de traduction qui demeure obscur. Il pourrait indiquer cependant que le traducteur, sans être un Latin, connaissait le grec. À la fin des *Verba Avicennae* (§4), pour rendre l'arabe *mağmağa*, détour, il aurait forgé à l'aide du grec le mot *cycliubacio** (littéralement « marche en rond »). Ce mot abrégé se lit dans le manuscrit de Bruges (B) au-dessus de la ligne⁴⁹, écrit d'une encre très pâle sinon à la pointe d'argent. Le texte en U et B dit *tyrubō*. Ne comprenant pas ce mot, le correcteur Bc a préféré traduire ici la variante arabe bien attestée *ğamğama*, hésitation⁵⁰, en lisant *tytubacio* (avec l'y du mot forgé) devenu *titubatio*.

À la fin de sa présentation (§4)⁵¹, Avicenne pose les différences entre ses deux ouvrages, le *Šifā'* et la *Philosophie orientale*. Dans la traduction latine, le premier est dit d'une grande simplicité (*planities multa*) tenant compte des opinions des collègues ; et malgré cela (*tamen*), il a une sorte de vive clarté étincelante qui, si le lecteur l'a bien comprise, lui permettra d'excuser l'ouvrage de cette simplicité.

« Qui ergo voluerit veritatem secundum viam in qua est aliqua declaratio versus <participes> et planities multa, aliqua tamen quasi⁵² coruscalis resplendentia quam si recte intellexerit, per hoc librum excusandum duxerit, istum appetat et requirat (§4 in fine) ».

⁴⁶ FONTAINE, *Abraham Ibn Daud cit. supra* n. 6, chap. 3.

⁴⁷ M. BOUYGES, *Roger Bacon a-t-il lu des livres arabes ?*, « AHDLMMA », 5, 1930, pp. 311-315. L'auteur souligne que Roger Bacon s'appuie toujours sur le même texte d'Avicenne, son Prologue au *Šifā'*.

⁴⁸ ROGER BACON, *Opus maius*, II, 13, éd. J. H. BRIDGES, Oxford 1897, vol. I, pp. 55-56 et BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon cit. supra* n. 10, p. 308 (ou 89) ; Id., *Opus maius*, III, 2, éd. BRIDGES, Supplementary volume, Londres - Edimbourg - Oxford 1900, p. 85 et BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon cit.*, p. 309 (ou 90) ; Id., *Opus tertium*, c. 23, éd. J. S. BREWER, Londres 1859, p. 78 ; Id., *Communia naturalium*, I, pars IV, <dist. 1>, c. 3, éd. R. STEELE, *Opera hactenus inedita Rogeri Bacon*, fasc. III, Oxford 1911, pp. 248, 18 - 250, 14, ind. dans BIRKENMAJER, *Avicennas Vorrede zum Liber Sufficientiae und Roger Bacon cit.*, p. 311. Ces textes de Roger Bacon sont repris en appendice à l'édition des *Verba Avicennae* dans l'édition critique de la *Logica Avicennae*, à paraître.

⁴⁹ Ms. Brugge, Stedelijke Openbare Bibl. 510, fol. 38va.

⁵⁰ GUTAS, *Avicenna cit.*, p. 45, n. i et p. 120.

⁵¹ GUTAS, *Avicenna cit.*, pp. 44-45.

⁵² *Aliqua tamen quasi ... excusandum duxerit* : texte arabe différent, traduit par « alludes to things which, had they been perceived, there would have been no need for the other book », GUTAS, *Avicenna cit.*, p. 45, §4 (texte latin non signalé).

«Donc celui qui aura voulu la vérité selon une méthode comportant quelque explication à l'égard des <collègues> et une grande simplicité, tout en ayant cependant une sorte de vive clarté étincelante qui, s'il l'a bien comprise, lui permettra d'en excuser l'ouvrage, qu'il désire et recherche ce livre-ci <le *šifā*>».

Ce sont les mots *coruscalis resplendentia* qui expriment cette «vive clarté étincelante». *Coruscalis* est un hapax du poète carthaginois du V^e s. Dracontius⁵³, qu'Avendauth/Ibn Daud avait pu lire après son arrivée à Tolède⁵⁴. Quant à *resplendentia*, c'est un mot d'Augustin employé dans l'une de ses lettres précisément à propos de la vérité: «Sicut luculentis ingeniis non deficit resplendentia veritatis»⁵⁵. De même qu'aux brillantes intelligences la vive clarté de la vérité ne fait pas défaut.

À la fin du §5⁵⁶, s'agissant de *quoadusque* («quoadusque in hac intentione librum edam proprium et singularem»), on se demande où Avendauth a trouvé ce mot compliqué et rare signifiant jusqu'à ce que. Mais, en reprenant saint Augustin pour guide, on voit que dans la préface à son *De civitate Dei*, celui-ci cite un verset de psaume donnant ce mot: *quoadusque iustitia convertatur in iudicium* (Ps. 93 [94], 15).

Si l'on rapproche cette citation d'un psaume de celle du prophète Isaïe prise précédemment⁵⁷ aux *Confessions*, on touche sans doute là à une méthode ingénieuse d'Avendauth. De manière générale, il a souvent recours aux citations bibliques dans la discussion philosophique⁵⁸. Ici, il choisit un auteur latin chrétien citant souvent l'Ancien Testament, saint Augustin; puis, mettant en parallèle certains mots latins cités avec le texte biblique qu'il connaît par ailleurs, il s'assurerait de leur sens exact avant de les employer dans sa propre traduction.

Il est intéressant de constater que les mots ou images de ces parties narratives sont souvent empruntés soit aux grands auteurs latins païens, Plaute, Lucrèce, Virgile et surtout Cicéron dans ses ouvrages rhétoriques (*Orator*, *De oratore*, discours *in Verrem*, *in Pisonem*) ou ses lettres etc., soit à des écrivains originaires d'Afrique du Nord: Apulée, Augustin, Dracontius, etc. C'est peut-être là un bref aperçu sur la culture latine de lettrés de langue arabe dans l'Espagne du XII^e siècle.

⁵³ DRACONTIUS, *Oreste*, v. 244, *Œuvres*, t. III, *La tragédie d'Oreste. Poèmes profanes I-V*, éd. J. BOUQUET, CUF, Paris 1995, pp. 100 et 178, n. 181. La survie de l'*Orestis tragoedia* au Moyen-Âge est peu attestée, mais son unique manuscrit provient sans doute d'un modèle en écriture wisigothique, *ibid.*, pp. 69-72.

⁵⁴ DRACONTIUS, *Œuvres*, t. I, éd. C. MOUSSY, C. CAMUS, CUF, Paris 1985, p. 106.

⁵⁵ S. AUGUSTIN, *Epistula* 155, 14.

⁵⁶ GUTAS, *Avicenna cit.*, p. 46.

⁵⁷ Voir *supra*, p. 9.

⁵⁸ FONTAINE, *Abraham Ibn Daud*, 4.1, cit. *supra* n. 6.

II. 2 AMBIGUÏTÉ ET ÉVOLUTION DE LA MÉTHODE DE TRADUCTION

Avendauth n'est pas un traducteur professionnel. On s'en aperçoit à son souci d'adapter le texte d'Avicenne à la compréhension immédiate des Latins (sens du mot *iuvenis*, transposition de l'évocation d'un schisme, suppression des formules proprement arabes etc.). Sa méthode empirique de traduction, recourant à des réminiscences littéraires ou empruntant le vocabulaire des textes anciens, suppose un important travail de recherche dans les textes. Mais elle n'est pas toujours soutenue par l'attention à la grammaire et/ou à la syntaxe latines. Ainsi, par exemple, les règles d'usage des pronoms réfléchis ne sont pas suivies, la concordance des temps des verbes est souvent négligée, etc.

À la suite de cette recherche se pose donc une question de fond : n'est-ce pas précisément parce que Avendauth ignorait le latin scolaire qu'il s'est donné tant de peine pour trouver dans les ouvrages latins du passé des expressions et un vocabulaire adéquats pour traduire les textes descriptifs accompagnant la *Logica* ?

À cela s'ajouterait une autre motivation pour utiliser des sources latines si diverses dans cette traduction. Avendauth/Ibn Daud estimait sans doute que, s'il voulait faire reconnaître la valeur des écrits d'Avicenne, il fallait que lui-même montre connaissance et respect pour la culture latine découverte en Espagne et en Afrique du Nord. Montrer à l'élite latine, tel l'archevêque de Tolède, que l'élite arabophone connaissait les auteurs latins anciens et les appréciait, pourrait susciter un rapprochement entre eux à ce niveau. En reprenant une expression de Gad Freudenthal, on pourrait ajouter que ce serait « cohérent avec ce que nous savons de la proximité de Ibn Daud avec les classes dirigeantes, juives comme non-juives »⁵⁹. D'où, dans la recherche des sources, ce mélange d'écrits classiques ou plus récents et de textes chrétiens comme des versets de l'Ancien Testament ou des citations de saint Augustin. Le but d'Avendauth dans cette démarche était surtout d'attirer la sympathie de l'archevêque pour obtenir son soutien dans son projet de traduction du *Šifā'*.

Dans ces conditions, faut-il vraiment supposer un latiniste inconnu, un mystérieux *socius* qui aurait écrit ce texte pour aider notre auteur arabophone ? S'il avait existé, il se serait très probablement exprimé dans un latin plus simple et plus naturel. Et il n'aurait pas cherché des sources si lointaines et si mêlées d'une référence à l'autre. Les affirmations sur la maladresse de ce supposé *socius* traducteur⁶⁰ s'expliquent fort bien si c'est Avendauth lui-même qui a réalisé la

⁵⁹ FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus* cit., p.74, à propos de l'aisance d'Avendauth à l'égard des autorités religieuses : « consistent with what we know of Ibn Daud's closeness to the ruling classes, both Jewish and non-Jewish ».

⁶⁰ Cf. D'ALVERNY, *Avicenne en Occident*, n° III, p. 63 ; n° IV, p. 341.

traduction de la *Logica* d'Avicenne et de ses prologues. On est en présence du cas rare d'une traduction latine voulue et réalisée par un auteur arabe en vue d'introduire les Latins à la connaissance des philosophes arabes, et du premier d'entre eux, Avicenne.

Mais, outre ces diverses difficultés constatées dans les traductions présentées : difficultés de vocabulaire comme de grammaire, l'archevêque de Tolède ne semble pas avoir été intéressé par un commentaire de plus de l'*Isagoge* de Porphyre, contrairement à ce qu'avait espéré Avendauth.

Par contre, il le fut vivement à l'idée d'une traduction du *De anima* d'Avicenne, texte dont Avendauth/Ibn Daud sut lui présenter la nouveauté philosophique et le prolongement religieux possible dans son prologue⁶¹ à l'ouvrage :

« Indignum siquidem ut illam partem sui qua est sciens, homo nesciat, et id per quod rationalis est, ratione ipse non comprehendat ».

« Il est vraiment indigne que l'homme ne connaisse pas cette part de lui-même d'où lui vient la connaissance, et qu'il n'appréhende pas par la raison ce par quoi il est un être raisonnable ».

Désormais convaincu du bien-fondé de l'entreprise proposée par Avendauth, mais aussi des difficultés de celui-ci à s'exprimer en latin, l'archevêque a cherché quelqu'un pour l'aider à poursuivre cette importante tâche de traduction. Il avait connu précédemment, alors qu'il était lui-même évêque de Ségovie (1149-1152), Dominicus Gundissalinus, attesté dès mai 1148 comme archidiacre de Ségovie⁶² (Castille-et-Léon). Il y avait dans cette ville probablement beaucoup de Juifs ayant fui l'Andalousie arabe, et l'arabe parlé devait y être fréquent. Gundisalvi dont la formation philosophique semble avoir été poussée⁶³, habitué à l'arabe parlé, était donc tout indiqué pour travailler avec l'*Israelita philosophus* Avendauth/Ibn Daud.

Il faut reconsidérer alors le changement de ton d'Avendauth entre sa présentation à l'archevêque de la traduction terminée de la *Logica* et celle en 1162 de la traduction terminée du *De anima* d'Avicenne⁶⁴. La première est une aimable proposition à l'archevêque, comme nous l'avons vu plus haut⁶⁵ :

⁶¹ Sur ce texte, voir S. VEGAS GONZÁLEZ, *La Transmision de la filosofía en el medioevo cristiano : el prologo de Avendauth*, « Revista Española de Filosofía Medieval », 7, 2000, pp. 115-125.

⁶² POLLONI, *Elementi per una biografia di Dominicus Gundisalvi* cit., p. 13.

⁶³ Sur la formation intellectuelle de Dominique Gundisalvi, A. FIDORA, *Die Wissenschaftstheorie des Dominicus Gundissalinus. Voraussetzungen und Konsequenzen des zweiten Anfangs der aristotelischen Philosophie im 12. Jahrhundert*, Akademie Verlag, Berlin 2003 (Wissenskultur und gesellschaftlicher Wandel, 6), pp. 98-101 et *passim*.

⁶⁴ POLLONI, *Elementi per una biografia di Dominicus Gundisalvi* cit., pp. 18-20.

⁶⁵ Cf. *supra*, pp. 3 et 5.

« Studiosam animam vestram ad appetitum translationis libri Avicennae quem Asschipse, id est Sufficientiam, nuncupavit, invitare cupiens... »,

« Désireux d'éveiller votre âme zélée à l'envie d'une traduction du livre d'Avicenne qu'il a intitulé *al-Šifā'*, c'est-à-dire *Sufficientia*, j'ai pris soin de convertir d'arabe en langue latine... »,

mais la seconde est l'exécution obéissante d'un ordre de cette autorité :

« Avendeuth israelita philosophus gratum debitaie servitutis obsequium <...> iussum vestrum, Domine, de transferendo libro Avicennae philosophi *De anima* effectui mancipare curavi... »⁶⁶.

« Le philosophe juif Avendauth, en hommage reconnaissant de soumission due. <...> J'ai pris soin, Monseigneur, de transmettre pour effet votre ordre concernant la traduction du livre du philosophe Avicenne *Sur l'âme*... ».

Les termes employés *gratum debitaie servitutis obsequium*, *iussum vestrum*, *effectui mancipare*, si opposés à l'amabilité du propos lors de la prise de contact entre Avendauth et l'archevêque, laissent peu de doute. L'archevêque, déçu et inquiet à la lecture de la traduction de la *Logica*, a fait acte d'autorité en ordonnant à Avendauth de traduire le second ouvrage, le *De anima* d'Avicenne, avec l'aide d'un tiers, signifié par les mots *effectui mancipare*, donner pour effet.

Ce serait donc entre la présentation par Avendauth à l'archevêque de Tolède de la *Logica* achevée et la commande qu'il en reçut de la traduction du *De anima* que l'archevêque, supérieur hiérarchique de l'archidiacone Dominique Gundisalvi, les aurait mis en relation, afin d'aider Avendauth/Ibn Daud.

Cette chronologie permet de rendre compte des caractères spécifiques de la traduction du corps de la *Logica*. En effet, après avoir surmonté les difficultés de traduction des textes narratifs, Avendauth avait enchaîné sur la traduction des développements philosophiques, qui lui étaient plus familiers. C'est donc seulement avec la traduction du *De anima* d'Avicenne que commence la collaboration de Avendauth et de Dominique Gundisalvi. C'est pourquoi Avendauth précise dans sa dédicace de l'ouvrage à l'archevêque leur méthode de travail en commun, inaugurée à cette occasion. L'insistance donnée au commun recours à une traduction rigoureuse *per singula verba*, c'est-à-dire mot à mot :

« et me singula verba vulgariter proferente et Dominico archidiacono singula in latinum convertente »⁶⁷

⁶⁶ Cf. p. 5 ; tout le texte dans D'ALVERNY, *Avendauth ?* cit., pp. 33-34.

⁶⁷ AVICENNA LATINUS, *Liber de anima seu Sextus de naturalibus*, I-II-III, éd. cit., pp. 3-4.

souligne bien la différence avec les précédentes traductions solitaires de la *Logica* qui procédaient par des moyens détournés, souvent exacts et bien choisis certes, mais parfois éloignés de l'original arabe et/ou écrits dans un latin incorrect ou correspondant mal au latin médiéval. La traduction mot à mot permet au contraire de vérifier que le mot est compris et de contrôler les formes grammaticales ainsi que les détails. Une fois la collaboration bien mise en route, le travail sera plus facile pour les ouvrages suivants.

III. AVENDAETH TRADUCTEUR D'UN TEXTE PHILOSOPHIQUE : LE CHAPITRE I-12 ARABE DE LA *LOGICA*, INTITULÉ *DE UNIVERSALIBUS*.

Dans la traduction des textes philosophiques, il ne s'agit plus pour le traducteur de recourir à des réminiscences littéraires. Pour rendre la pensée d'Avicenne qu'il connaît bien, Ibn Daud doit s'attacher à une traduction rigoureuse de l'original. Le vocabulaire moins diversifié facilitera la tâche. En outre, s'agissant de philosophie, il n'est plus besoin d'adapter le texte arabe aux usages latins.

La traduction du *De universalibus*, chapitre arabe I-12 qui résume la pensée d'Avicenne sur les universaux, est pour nous un bon exemple de ce travail. À juger par le nombre de ses manuscrits, elle fut appréciée des Latins. On peut en partager les dix manuscrits connus en trois groupes⁶⁸ : le chapitre a été parfois isolé (ODOrRS), puis ajouté à la fin de la *Logica* (UBCG), ou bien placé à sa juste place dans le texte (V), c'est-à-dire après le chapitre I-10 (11).

Sur ces dix manuscrits, cinq en attribuent nommément la traduction à Avendauth (UBGDR), et un lui en attribue même la rédaction (O). Les autres laissent le texte dans l'anonymat (CVSOr). Par ailleurs, trois manuscrits (NPM) omettent le texte lui-même. Pour examiner le *De universalibus* dans un état assez proche de la traduction d'Avendauth, il faut consulter le manuscrit Oxford, Digby 217 (O), qui paraît être le meilleur, bien que son titre soit erroné :

⁶⁸ On donne ici la signification des sigles des manuscrits. On trouvera leur description au chapitre III de la Tradition manuscrite, intitulé « Les manuscrits de la *Logica Avicennae* » dans l'édition critique de la *Logica Avicennae* à paraître. — (O) Oxford, Bodleian Libr., Digby 217, XIII^es.²; (D) Dubrovnik, Bibl. des Dominicains 63 (36-V-6), XIII^es.²; (Or) Oxford, Oriel College 7, XIV^es.¹ (résumé avec extraits); (R) Roma, Bibl. Angelica 242 (C.4.10), XIII^es.²; (S) Paris, BnF, latin 16096, ca. 1280; (U) Città del Vaticano, Vatican lat. 4428, XIII^es.²; (B) B Brugge, Stedelijke Openbare Bibl. 510, XIII^es.²; (C) Cordoba, Cabildo 52, XIV^es.¹ (chapitre entier, à la suite d'extraits de l'ouvrage); (G) Graz, Universitätsbibl. 482, XIII^es.²; (V) Città del Vaticano, Vatican lat. 2186, XIII^es.²; (N) Napoli, Biblioteca Nazionale VIII. E. 33, XIII^es.²; (P) Paris, Bibliothèque nationale de France, latin 6443, fin XIII^es.; (M) Oxford, Merton College 282, XIV^es.¹.

Oxford, Bodleian Library, Digby 217 (XIII^es.²), ff. 95r-96v⁶⁹. «Incipit liber Avendeuth de universalibus assumptus ex quinto Methaphysice (sic) Avicenne» (tit. curr. Avendeuth, in tabula contentorum saec. XIV f. 1v Avendeuth de .V. universalibus). Avendauth est ici considéré comme l'auteur de cet ouvrage à part, qui serait tiré du l. V de la *Métaphysique* d'Avicenne.

Relevons quelques particularités de O, dans l'ordre du texte⁷⁰:

a) ... diceretur quod uno respectu sunt ante multiplicitatem et alio cum multiplicitate *et alio post multiplicitatem* (om. cett.) — éd. Venise, 1508, fol. 12ra.

Au début du chapitre, l'addition propre à O *et alio post multiplicitatem* ne fait qu'achever l'idée des commentateurs alexandrins de Porphyre⁷¹ reprise dans la phrase « Et fortassis etiam diceretur quod uno respectu sunt ante multiplicitatem, et alio cum multiplicitate, et alio post multiplicitatem ».

b) ... una essentia verissime quae est animal (verissime en O^{Or}RS, verissima ailleurs) — éd. 1508, fol. 12rb. Ici, l'adverbe est plus proche de l'arabe.

c) ... ut ponatur *super eam* comparatio (en O seul) — éd. 1508, fol. 12rb. *Super eam* désigne l'*animalitas intellecta* dont il vient d'être question dans un rappel d'Ammonius⁷².

d) quelques lignes plus loin (éd. 1508, fol. 12rb), le texte souffre d'un saut du même au même, qui remonte probablement très tôt dans la transcription arabe:

« Sicut album quod in se est aliquid in intellectu <...> sed quod sit homo (lacuna in O) praeter illud quod intelligitur de illo, sed cum sequitur ad aliud et putatur esse unum »⁷³.

Ici le manuscrit O (fol. 95r) est seul à présenter une lacune après *sed quod sit homo*, là où les autres manuscrits ajoutent *vel lapis (est...)*. Cette lacune semble

⁶⁹ Avicenna latinus. Codices, p. 141-145 ; M.-T. D'ALVERNY, *Avicennisme en Italie*, in *Oriente e Occidente nel Medioevo: Filosofia e Scienze* (Actes du Congrès international, 9-15 avril 1969 ; Accademia nazionale dei Lincei, Fondazione Alessandro Volta, n° 13), Accademia nazionale dei Lincei, Rome 1971, repr. in *Avicenna en Occident* cit., n° XVI, p. 138.

⁷⁰ Référence est faite ici à l'édition Venise, 1508. On trouvera l'édition critique du *De universalibus* à la fin de celle de la *Logica Avicennae*. Je remercie Silvia Di Vincenzo d'avoir bien voulu collationner les mots latins avec l'arabe.

⁷¹ AMMONIUS, *In Porphyrii Isagogen*, ed. A. BUSSE, Reimer, Berlin 1891 (CAG IV. 3), pp. 68, 25 - 69, 1 ; DAVID, *In Porphyrii Isagogen*, ed. A. BUSSE, Reimer, Berlin 1904 (CAG XVIII. 2), p. 113, 14-18.

⁷² Cf. AMMONIUS, *In Porphyrii Isagogen*, ed. BUSSE, p. 31, 16-20.

⁷³ Texte manquant à compléter avec M. E. MARMURA, *Avicenna's Chapter on Universals in the 'Isagoge' of his 'Šifā'*, in A. T. WELCH, P. CACHIA eds., *Islam : Past Influence and Present Challenge*, Edinburgh University Press, Edinburgh 1979, p. 48 : « [This is akin to 'white', which in itself has a concept] that does not require with it the conception that it is a garment or that it is wood. If <one of these> is conceived with it, then something to which white attaches has been conceived. Similarly, 'one' in itself has a concept [that it is a man or a tree, however, is something extraneous to this concept it has, that attaches later to its being one]... ».

marquer le refus du traducteur de rendre le mot signifiant pierre, attesté dans plusieurs manuscrits arabes⁷⁴ mais ne correspondant pas au raisonnement d'Avicenne, que l'ancienne erreur de transcription a altéré. Avicenne donnait homme et arbre comme exemples du concept de 'un', mais par suite du saut de texte signalé plus haut, les exemples se sont trouvés appliqués à 'blanc' et non à 'un'. On a donc remplacé arbre par pierre pour que homme et pierre se rapportent à 'blanc'. Mais la fin de la phrase retrouvant le concept de 'un' disparu dans l'erreur de transcription, la pierre ne convient plus. Le mot arabe signifiant pierre n'appartient donc pas au texte d'Avicenne et pour le philosophe Ibn Daud il n'a pas à être traduit, d'où la lacune.

e) Plus loin, le texte dit :

« Sed secundum quod est aliquid de hiis quae pertractat loycus, genus est logicum ».

Le mot cicéronien *pertractat* signifiant traiter à fond n'est plus compris. Il est transmis par ODO, manuscrits issus l'un de l'autre. Mais ailleurs, dans *hiis quae pertractat* le mot est dissocié en *per* + complément + *tractat* (eis per que tractat UBRVGS eis per se tractat C).

f) le manuscrit O a une variante intéressante dans le passage qui explique que l'homme est une espèce, mais ne peut être genre (éd. 1508, fol. 12rb *in fine*) :

« Homo enim, qui est species animalis secundum hoc quod est animal, non predicatur de eo cum animalitate generalitas quae accidit animalitati, neque nomine neque diffinitione. Hominem enim non oportet fieri genus neque nomine neque diffinitione secundum quod predicatur de illa animalitas, sicut debet esse animal nature diffinitione, et secundum hoc de eo animalitas predicatur ».

« L'homme en effet, qui est une espèce d'animal en tant qu'il est un animal, n'a pas pour prédicat avec l'animalité la généralité qui concerne l'animalité, ni par le nom ni par la définition. Il ne faut pas en effet que l'homme devienne genre ni par le nom ni par la définition du fait que l'animalité est prédiquée de celle-là <la généralité> à la façon dont il doit être animal par la définition de sa nature, et c'est par là que l'animalité est prédiquée de lui ».

Ce passage semble assez clair, même si l'on n'y retrouve pas le mot *corpus* figurant dans l'arabe et rendu ici par *naturae diffinitione*⁷⁵. Car c'est bien sa

⁷⁴ DI VINCENZO, *Avicenna's Isagoge, Chap. I, 12 cit.*, p. 452, n. 37 (cliché de O), pp. 452-453 et 456 (liste des mss. arabes).

⁷⁵ Comparaison avec l'arabe dans DI VINCENZO, *Avicenna's Isagoge, Chap. I, 12 cit.*, pp. 454-455 et nn. 40 et 42.

nature corporelle qui fonde l'animalité de l'homme. Le manuscrit O est le seul des manuscrits latins à donner ces formulations, alors que les autres manuscrits reprennent pour la troisième fois la formule « nomine et diffinitione ».

g) on relèvera plus loin la traduction en O seul (éd.1508, fol. 12va) :

« id quod est in sapientia conditoris et ad angelos de veritate cogniti et comprehensi... ».

L'expression *conditoris et ad angelos* s'oppose à tous les autres manuscrits qui donnent *creatoris et angelorum*, la formule chrétienne ou arabe. Ibn Daud, qui n'utilise pas toujours le mot 'créateur'⁷⁶, reprend ici le terme antique *conditor*⁷⁷. Et surtout, il disjoint la sagesse du créateur de ce qu'en connaissent les anges. L'adjonction de la préposition *ad* dans une construction latine maladroite pour introduire les anges, marque bien une différence fondamentale entre la sagesse de Dieu et ce que peuvent en atteindre les anges. Cette dissociation de Dieu et des anges correspond assez à un trait de la pensée théologique d'Abraham Ibn Daud, qui insiste sur le rôle instrumental assigné aux anges. Ce point de la tradition juive⁷⁸ expliquerait que la traduction s'éloigne ici à la fois de l'arabe et du latin habituels.

h) ... quia ad alium tractatum sapientem pertinet (OD, ailleurs *sapientiae*) — éd. 1508, fol. 12va. *Sapientem* traduit le mot arabe rendant l'adjectif 'savant'.

Par rapport aux autres manuscrits, on est frappé à la lecture du texte de O de sa relative concision qui conserve cependant un souci de précision par rapport à l'arabe dans le choix des mots latins. Ainsi, on observe le recours à deux termes de sens différents mais complémentaires réunis par *et*, comme *discretio et dispersio*, pour traduire un seul terme arabe, *tafrīq*⁷⁹, afin d'en cerner tout le champ sémantique. Mais, habitué au latin classique, le traducteur n'a introduit que très peu le verbe être comme copule du sujet et du prédicat dans ce chapitre I-12, ce que les autres manuscrits ont corrigé.

Cependant, l'archevêque Jean de Castelmoron mourut dès 1166. Ce fut un rude coup à la fois pour Avendauth/Ibn Daud qui perdait son protecteur et pour la *Logica* qui, n'ayant pas été reprise, resta longtemps oubliée.

⁷⁶ FONTAINE, *Abraham Ibn Daud*, cit. 5.3 : « ... in Ibn Daud's designations of God, such as "the first unmoved mover", "the necessary being" or "the first cause" rather than "the Creator" ».

⁷⁷ SÉNÈQUE, *De providentia* V, 8.

⁷⁸ D'ALVERNY, *Avendauth ?* cit., pp. 41-42 ; FONTAINE, *Abraham Ibn Daud* cit., 5.4 in fine.

⁷⁹ DI VINCENZO, *Avicenna's Isagoge*, Chap. I, 12 cit., pp. 461-464.

IV. ÉVOLUTION ET SURVIVANCES DU TRAVAIL D'AVENDAETH

Puis, quand l'intérêt pour la *Logica Avicennae* commença à la diffuser, dans la seconde moitié du XIII^e siècle, le texte d'Avendauth, passant entre les mains des différents copistes, fut progressivement adapté au latin médiéval. Les manuscrits cherchent à transformer sa langue en un latin médiéval académique et didactique, ajoutant en particulier de nombreux mots de liaison et/ou des formules explicatives semées de *est*, de *quod* et de *quia*. On constate également un plus grand souci de la grammaire. Dans l'expression première, les verbes sont souvent à l'indicatif présent. Par la suite, ils sont mis aux temps et mode convenables (parfait, futur, subjonctif, etc.). Les manuscrits présentent alors une grande diversité dans les termes et leur ordre.

Avendauth/Ibn Daud avait mis tous ses soins pour susciter chez l'archevêque de Tolède l'envie de patronner une traduction du *Šifā'* et pouvoir ainsi, avec son aide, apporter aux Latins les bienfaits de la philosophie d'Avicenne. Mais il ne s'était pas rendu compte qu'en traduisant à l'aide de la langue latine classique, il ne serait pas compris par les Latins du XII^e-XIII^e siècle. Il y avait longtemps que les Latins ne comprenaient plus la langue de la Rome antique. Leur vocabulaire ignore la langue littéraire, désormais archaïque et obscure. Les siècles passés, les peuplements nouveaux issus des migrations etc. ont rendu vains les efforts érudits de cette sorte. L'évolution de la tradition manuscrite de la *Logica Avicennae* le confirme, car on y voit la disparition progressive de la version première, aboutissant vers la fin du XIII^e siècle à une relecture actualisée de l'ensemble.

On peut appliquer à la *Logica Avicennae* ce que dit Simone Van Riet de la traduction latine du *De anima* d'Avicenne par Avendauth et Dominique Gundisalvi. Le premier traducteur serait ici Avendauth et le réviseur Gundisalvi :

« Tout se passe comme si cette traduction avait été élaborée par un premier traducteur, puis qu'une révision avait eu lieu, conservant la majeure partie du texte primitif, mais modifiant des mots, des particules, des tournures syntaxiques, parfois des phrases entières »⁸⁰.

S'agissant de la *Logica*, ce n'est pas une révision suivie ; c'est davantage le résultat des choix de l'un ou l'autre copiste se ralliant à un manuscrit antérieur dont le texte lui semble meilleur, de sorte que l'on n'aboutit pas à deux versions distinctes opposables⁸¹. L'intérêt doit se concentrer sur les variantes. Les manuscrits U et B présentent les variantes les plus anciennes, qui sont aussi les plus contestées.

⁸⁰ S. VAN RIET, *La traduction latine du « De anima » d'Avicenne. Préliminaires à une édition critique*, « Revue philosophique de Louvain », 1963, 61, n°72, pp. 583-626 (583-584).

⁸¹ Cf. le *stemma codicum* dans « La Tradition manuscrite », Introduction à l'édition critique de la *Logica Avicennae*.

Il y eut alors dans la transmission une modernisation progressive de l'expression tendant à l'actualiser par une formulation plus directe, ou à remplacer le vocabulaire classique, archaïque et mal compris des médiévaux, par un langage plus courant. En conséquence, on voit parfois surnager en U des mots rares inconnus du latin médiéval et survivances de la traduction latine d'Avendauth. Au chapitre I-2 (3), on retrouve le mot *suffultus* emprunté au *De natura rerum* de Lucrèce⁸², qui se voyait déjà dans les *Verba discipuli*. Les variantes remplacent parfois un mot littéraire par son radical plus connu mais moins précis. Ainsi en I-3 (4), *collocutio* (UB) devient partout ailleurs *locutio*, ou bien en II-3 *divulgatae* (UB) devient *vulgatae* (NVG). Or, *collocutio* désigne chez Cicéron⁸³ un entretien et *locutio* une simple parole, et dans la phrase de I-3 (4): «*quia cogitatio quasi collocutio est inter ipsum hominem et cogitatum suum verbis imaginatis*», *collocutio* est bien meilleur.

De même, au chapitre I-8 (9), à propos de la définition des termes relatifs, dans la phrase «*Haec autem mensio auget dubitationem in aliis quae sunt praeter genus et speciem*», Avendauth reprend en U le mot de Cicéron⁸⁴ *mensio* signifiant appréciation. Mais ce mot est sans doute complètement oublié, car tous les autres manuscrits le remplacent par *responsio*.

Une évolution significative est par exemple celle du mot littéraire tardif *parilitas* signifiant égalité. On lit au chapitre I-5 (6): «*Nam dualitatem comitatur parilitas*». Les manuscrits U et B n'ont pas su adopter le mot, qu'ils transcrivent *pluralitas*. Il revient trois fois au chapitre I-7 (8): le manuscrit N lit *parilitas* les deux premières fois, mais à la troisième il le remplace par son équivalent *paritas* (NP), alors que *parilitas* subsiste en VGM et que *pluralitas* revient dès la deuxième fois en UB. Or, *parilitas* est un mot rare d'Apulée⁸⁵, auteur favori d'Avendauth semble-t-il, tandis que *paritas* est un mot bien connu de Boèce.

V. MORT D'ABRAHAM IBN DAUD/AVENDAETH

Cette évolution s'est faite dans des manuscrits de la seconde moitié du XIII^e siècle, alors que la diffusion de la *Logica* s'est trouvée marquée par un événement tragique et brutal: la mort d'Abraham Ibn Daud en 1180.

Elle est rapportée par le savant tolédan Juda B. Salomon ha-Cohen (ca. 1215-apr. 1247) qui vécut à Tolède quelques décennies après Ibn Daud. Les circonstances ne sont pas précisées, mais l'auteur tolédan affirme qu'en cette année 1180 Ibn

⁸² LUCRÈCE, *De natura rerum*, IV, 427 et 867.

⁸³ CICERO, *Epistulae ad Atticum*, XII, 1, 2.

⁸⁴ CICERO, *Orator*, 177.

⁸⁵ APULÉE, *Métamorphoses* ou *L'âne d'or*, II, 10.

Daud « mourut pour la Sanctification du Nom », c'est-à-dire en martyr de sa foi⁸⁶. Les expressions hébraïques utilisées (*al yihud ha-shem* ou *al qiddush ha-shem*) sont employées exclusivement pour indiquer « la mort par un Juif en raison de la religion juive »⁸⁷. Cet important témoignage historique contemporain remplace les mentions tardives du XVI^e siècle citées pendant longtemps.

La réaction de Dominique Gundisalvi à l'événement fut aussi rapide que radicale. Dès l'année suivante, en 1181, il avait vendu le terrain qu'il possédait à Tolède et quitté définitivement la ville. On n'y parlera plus de lui. La dernière attestation de sa présence au chapitre de Tolède date de 1178⁸⁸. Il fut certainement profondément bouleversé par cette mort d'Avendauth/Ibn Daud, après une collaboration de près de vingt ans. Et l'importante filiation arabe que l'on observe dans les ouvrages de Gundisalvi, au-delà même de traductions arabo-latines nouvelles, porte la marque d'Abraham Ibn Daud⁸⁹.

Après l'échec de la *Logica* auprès de l'archevêque Jean de Castelmoron, Avendauth/Ibn Daud, conscient de ne pas savoir s'exprimer en latin de son temps, aura poursuivi l'instruction de Dominique Gundisalvi dans la langue et la culture philosophique arabe, et se sera associé à ses écrits comme mentor, comme guide. On a bien souligné ces influences de Ibn Daud sur les ouvrages de Gundisalvi⁹⁰. Accueilli par les chrétiens de Tolède alors qu'il venait d'être chassé de l'Andalousie arabe, Abraham Ibn Daud eut à cœur de leur transmettre tout ce qu'il connaissait d'Aristote et des philosophes arabes aristotélisants, en vue de leur donner les moyens de mener à l'égard du christianisme l'effort de rationalisation philosophique qu'il avait lui-même conduit à l'égard du judaïsme dans son *ha-Emunah ha-Ramah*⁹¹. C'est déjà en ce sens qu'il avait proposé à l'archevêque de Tolède d'entreprendre la traduction du *Šifā'* d'Avicenne, l'accompagnant du témoignage enthousiaste du fidèle disciple al-Ġūzġānī (*Verba discipuli*) et du plan de l'ouvrage rédigé par l'auteur (*Verba Avicennae*).

Avendauth/Ibn Daud, travaillant avec Dominique Gundisalvi, aura souligné auprès de lui l'importance du point de vue et de la méthode rationnels dans l'approfondissement des problèmes philosophiques et théologiques. Et l'ensemble

⁸⁶ C. SIRAT, *Juda B. Salomon ha-Cohen, philosophe, astronome et peut-être kabbaliste de la première moitié du XIII^es.*, « Italia », 1/2, 1978, pp. 39-61 (43) ; FONTAINE, *Abraham Ibn Daud* cit., § 2.

⁸⁷ To indicate death by a Jew on account of the Jewish religion : ces précisions m'ont été communiquées par une autorité liée par l'anonymat. Je l'en remercie sincèrement.

⁸⁸ POLLONI, *Elementi per una biografia di Dominicus Gundisalvi* cit., p. 20 et n. 76.

⁸⁹ FIDORA, *Die Wissenschaftstheorie des Dominicus Gundissalinus* cit., pp. 160-165, 187 et ss.

⁹⁰ D'ALVERNY, *Avendauth ?* cit., pp. 40-43. — R. FONTAINE, *In Defence of Judaism : Abraham Ibn Daoud. Sources and Structure of ha-Emunah ha-Ramah*, Van Gorcum, Assen 1990 (*Studia Semitica Neerlandica*), pp. 262-263, etc.

⁹¹ FIDORA, *Die Wissenschaftstheorie des Dominicus Gundissalinus* cit., pp. 188-189.

de ce champ d'études en a été sensiblement déplacé, comme le souligne Jean Jolivet dans sa conclusion tirée de l'examen successif des ouvrages personnels de Dominique Gundisalvi (*De unitate, De scientiis, De divisione philosophiae, De processione mundi, De anima*)⁹²:

« Tout se passe comme s'il [Dominique Gundisalvi] voulait remplacer la théologie des saints par une théologie des philosophes, dont il reste libre de se démarquer à l'occasion, mais qui dans son ensemble fournit les grands cadres conceptuels où viendront se placer les documents fournis par l'Écriture, les saints et les mystiques. Sous l'apparence unie de son texte, il y a là un mouvement considérable, un écart important par rapport à la sagesse traditionnelle. [...] L'ensemble de ses traités transmet aux Latins un système à peu près complet de métaphysique, qui ne contredit pas les enseignements d'Augustin, de Denys, de Boèce, qui au contraire leur est cohérent — mais qui, par sa masse et surtout à cause des structures qu'il propose, les intègre, comme des matériaux de choix, à un édifice profane ».

Dominique Gundisalvi, fuyant Tolède, retourna à Ségovie, où il est encore cité au chapitre de la cathédrale pour l'année 1190. Il est décédé avant 1198, date à laquelle apparaît dans les registres un nouvel archidiacre de Cuéllar, proche de Ségovie⁹³. Il semble n'avoir rien publié durant ces dernières années.

La mort de Avendauth/Ibn Daud, mystérieuse pour les chrétiens, est à l'origine de légendes qui ont circulé autour d'un Avendauth converti ayant pris le nom de Jean⁹⁴.

VI. DIFFUSION DE LA *LOGICA* SELON DEUX VOIES

Après la disparition brutale d'Avendauth la diffusion de la *Logica Avicennae* s'est organisée au XIII^es. en deux courants distincts sans être totalement séparés.

Il y eut un courant de transmission de la *Logica* portant de moins en moins attention à Avendauth. Il s'est manifesté surtout en Italie. Ainsi, à propos du chapitre I-12 *De universalibus* que contient le manuscrit D (Dubrovnik, Bibliothèque des Dominicains 63), ajouté d'une main italienne un peu plus tardive sur le dernier feuillet de ce manuscrit de la *Métaphysique* d'Avicenne: il est présenté avec exactitude « Tractatus de universalibus translatus a Buen Deut de libro Avicenne de loyca », mais c'est le seul manuscrit à employer le

⁹² J. JOLIVET, *The Arabic inheritance* (trad. anglaise), in P. DRONKE ed., *A History of Twelfth-Century Western Philosophy*, Cambridge University Press, Cambridge 1988, pp. 113-148 (134-145); en français *Philosophie au XII^e siècle latin: l'héritage arabe*, dans J. JOLIVET, *Philosophie médiévale arabe et latine. Recueil d'articles*, Vrin, Paris 1995 (Études de philosophie médiévale, 73), pp. 47-77 (65-74).

⁹³ POLLONI, *Elementi per una biografia di Dominicus Gundisalvi* cit., p. 21.

⁹⁴ Voir par exemple D'ALVERNY, *Avicenne en Occident* cit., n^o 1, p. 8; II, p. 14 etc.

nom du traducteur sous sa forme hébraïque⁹⁵. Le manuscrit est resté au couvent dominicain de Dubrovnik (*olim* Raguse), fondé en 1225.

Plus généralement, les médecins-philosophes italiens intéressés par les textes d'Avicenne en recherchent les manuscrits sans se soucier du traducteur Avendauth. Ainsi, le ms. R (Rome, Biblioteca Angelica 242) donne le *De universalibus* sans titre et attribué à un vague *Evendeut* sans précision.

C'est à Naples, proche des textes arabes, que se fit sans doute une révision sur le texte d'Avicenne du commentaire de l'*Isagoge* proprement dit, dans le ms. Napoli, Biblioteca Nazionale VIII. E. 33 (N). Ce manuscrit le reprend à l'exclusion des préliminaires ajoutés par Avendauth lors de sa présentation à l'archevêque de Tolède Jean de Castelmoron vers 1160-1161. Le chapitre I-12 *De universalibus*, souvent attribué à Avendauth, est également absent. Dans ce manuscrit de Naples (N), le texte de la *Logica* s'est affranchi à travers les choix des copistes du XIII^e siècle des survivances de la traduction d'Avendauth du siècle précédent.

Le manuscrit V (Vaticanus latinus 2186), également d'origine italienne, est plus nuancé. Voyant que N a omis le chapitre I-12, il l'a recherché à sa vraie place dans le texte arabe d'Avicenne. C'est ainsi qu'il est le seul manuscrit à en avoir correctement placé la traduction. Il donne également l'exacte traduction du titre, mais sans un mot sur le traducteur.

Par contre, le ms. G (Graz, Universitätsbibliothek 482), d'origine parisienne, qui suit V assez souvent, connaît Avendauth et les manuscrits parisiens U et B. Quant aux manuscrits P (Paris, BnF latin 6443) et M (Oxford, Merton College 282), ils suivent tantôt N, tantôt ce second groupe.

Car il y eut aussi un courant prenant en compte Avendauth, rassemblant ses textes et les diffusant. Il est animé par les Frères Prêcheurs (« *Ordo Praedicatorum* » ou O.P.) ou Dominicains. L'ordre de saint Dominique, un Espagnol du Nord, est né en ce début du XIII^es. pour appuyer la foi chrétienne sur de solides études fondées sur les textes, afin de pouvoir combattre l'hérésie. Le personnage d'Avendauth favorisant la traduction arabo-latine des ouvrages d'Avicenne était pour eux intéressant. Ce n'est pas un hasard si le premier couvent fondé par saint Dominique en Espagne le fut précisément à Ségovie, en 1218⁹⁶. À partir de là sans doute, les Dominicains purent récupérer le « dossier d'Avendauth », c'est-à-dire la *Logica* et ses textes préliminaires, abandonné à l'archevêché de Tolède. Ce courant en effet est représenté principalement par les manuscrits U et B⁹⁷. Les Dominicains y ont probablement joint la traduction du chapitre I-12 de la *Logica* (*De universalibus*), transmise également dans le manuscrit d'un dominicain

⁹⁵ FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus* cit., p. 77.

⁹⁶ M.-H. VICAIRE, *Histoire de saint Dominique*, II, Les éditions du Cerf, Paris 1957, p. 126.

⁹⁷ Voir « La Tradition manuscrite » dans l'édition critique de la *Logica Avicennae*, à paraître.

anglais (Oxford, Bodleian Library, Digby 217 = O). Avendauth y est considéré comme l'auteur du *De universalibus*, présenté comme un *liber* indépendant tiré du l. V de la *Métaphysique* d'Avicenne qui traite également des universaux⁹⁸. La qualité du texte et de la traduction a mis l'accent sur Avendauth sans que la *Logica* d'Avicenne soit mentionnée. Marie-Thérèse d'Alverny indique : « Ce manuscrit composite est du reste en partie, d'après l'écriture, d'origine espagnole »⁹⁹.

Cependant, le meilleur relais d'Avendauth fut le célèbre dominicain Albert le Grand.

VII. ALBERT LE GRAND O.P. (v. 1193-1280) ET AVENDAUTH

Le savant dominicain est tout à fait conscient de l'existence et du travail du traducteur arabo-latin de la *Logica Avicennae* qu'il présente ainsi dans son *Super Porphyrium de V universalibus* :

« Quamvis in prae habitis iam determinatum sit id quod de quinque universalibus tradidit Porphyrius, tamen adhuc sunt quaedam quae utile est scire de his quae ex logicis doctrinis Arabum in latinum transtulit Avendeuth, Israelita philosophus, et maxime de logica Avicennae »¹⁰⁰.

« Bien que l'on ait déjà déterminé précédemment ce que Porphyre a transmis sur les cinq universaux, il y a cependant encore certains points qu'il est utile de savoir. Ils sont tirés de ce que le philosophe israélite Avendauth a traduit en latin des doctrines logiques des Arabes, et surtout de la Logique d'Avicenne ».

Le témoignage d'Albert le Grand sur Avendauth affirme clairement que celui-ci a traduit en latin des parties de la Logique d'Avicenne, en l'occurrence *al-Madhal*. Il connaît même plus largement l'activité d'Abraham Ibn Daud. Il en parle sous le nom de David Judaeus au début de son propre *De causis et processu universitatis a prima causa*, où il énumère en premier lieu les différents noms donnés au *Liber de causis*. Il présente cet ouvrage en ces termes :

« Accipiemus igitur ab antiquis quaecumque bene dicta sunt ab ipsis, quae ante nos David Judaeus quidam ex dictis Aristotelis, Avicennae, Algazelis et Alfarabii congregavit, sicut et Euclides in geometricis fecisse videtur. Sicut enim in Euclidis

⁹⁸ Cf. table des chapitres in AVICENNA LATINUS, *Liber de philosophia prima*, V-X, éd. S. VAN RIET, Peeters - Brill, Louvain - Leiden 1980, pp. 98*-100*.

⁹⁹ M.-T. d'ALVERNY, *La tradition manuscrite de l'Avicenne latin*, in *Mélanges Taha Hussein*, Le Caire, 1962, repr. in *Avicenne en Occident* cit., n° VI, p. 75, n. 18.

¹⁰⁰ ALBERT LE GRAND, *Super Porphyrium de V universalibus*, ed. M. SANTOS NOYA, Aschendorff, Münster 2004, p. 142a, 7-12.

commento probatur theorema quodcumque ponitur, ita et David commentum adhibuit quod nihil aliud est nisi theorematis propositi probatio »¹⁰¹.

« Nous recueillerons donc des anciens tout ce qu'ils ont dit de bien, qu'avant nous un certain David le Juif a tiré et rassemblé des dits d'Aristote, Avicenne, al-Ġazālī et al-Fārābī, comme Euclide aussi semble l'avoir fait en géométrie. En effet, de même que dans le commentaire d'Euclide tout théorème posé est prouvé, de même aussi David a appliqué un commentaire qui n'est rien d'autre que la preuve du théorème proposé ».

Albert considère donc Avendauth comme le compilateur (*congregavit*) d'extraits d'Aristote, Avicenne, al-Ġazālī et al-Fārābī, les ordonnant sous forme de théorèmes commentés à la façon d'Euclide. Le *De causis* serait donc une anthologie de « dits » d'anciens philosophes grecs et arabes, présentés sous forme axiomatique.

Et Albert d'enchaîner :

« Pervenit autem ad nos et *Physica* per eundem modum ab eodem philosopho perfecta, ubi istum librum <*De causis*> *Metaphysicam* nominavit... »¹⁰².

« Or, il est aussi parvenu jusqu'à nous une *Physique*, exécutée de la même manière par le même philosophe, où il a appelé ce livre <le *De causis*> *Métaphysique* ».

Ainsi ce serait par rapport à une *Physica* organisée par lui de la même manière que le *De causis*, que Ibn Daud aurait nommé celui-ci *Metaphysica*, que l'on peut aussi comprendre comme « après la Physique ». On en retrouve l'appellation dans le manuscrit du *De causis* Oxford, Bodley, Selden supra 24 (début XIII^e s.), f. 83v : « Explicit Metaphysica (sic) Avendeuth ».

On a découvert récemment un fragment judéo-arabe de la *genizah* de Budapest, qui faisait partie à l'origine d'une anthologie sur la physique comprenant des écrits de différents philosophes. Une page contient la fin d'un texte de physique que deux colophons attribuent à Abraham Ibn Daud¹⁰³. C'est le seul texte arabe qu'on lui connaisse. Il a été publié¹⁰⁴ et une première étude a précisé que ces

¹⁰¹ ALBERT LE GRAND, *De causis et processu universitatis a prima causa*, ed. W. FAUSER, Aschendorff, Münster 1993 (*Opera omnia* XVII/2), p. 59, 9-18, cité par BERTOLACCI, *Albert the Great and the Preface of Avicenna's Kitāb al-Šifā'* cit., pp. 135-136, n. 16.

¹⁰² ALBERT LE GRAND, *De causis et processu universitatis a prima causa*, ed. FAUSER cit., p. 59, 19-21.

¹⁰³ K. SZILÁGYI, *A Fragment of a Book of Physics from the David Kaufmann Genizah Collection (Budapest) and the Identity of Ibn Daud with Avendauth*, « Aleph », 16/1, 2016, pp. 11-31.

¹⁰⁴ K. SZILÁGYI, Y. TZVI LANGERMANN, *A Fragment of a Composition on Physics by Abraham Ibn Daud in Judeo-Arabic: an Edition of the Text*, « Aleph », 16/1, 2016, pp. 33-38.

commentaires portent sur la *Physique* d'Aristote¹⁰⁵. Ajoutons que Juda b. Salomon ha-Cohen, l'auteur qui a fait connaître le martyr d'Ibn Daud à Tolède, lui attribue dans son encyclopédie *Midrash ha-Hokhma* (fol. 52v) un passage sur le l. V de la *Physique*¹⁰⁶.

Selon Albert le Grand donc, cette *Physique* serait à l'image du *De causis* une sorte d'anthologie de l'ouvrage d'Aristote et de ses commentateurs compilée par Abraham Ibn Daud. Sans entrer dans cette question et dans tout ce qu'elle implique, on peut rappeler ici qu'Albert le Grand connaissait les travaux d'Avendauth/Abraham Ibn Daud. L'expression utilisée *pervenit ad nos* suggère même que ce texte était traduit en latin.

En conclusion, les données des textes traduits tout comme celles des manuscrits, confortées par le témoignage explicite d'Albert le Grand, plaident en faveur de l'*Israelita philosophus* Avendauth/Ibn Daud comme seul traducteur latin de la *Logica Avicennae*. Il avait la culture latine d'un lettré étranger intéressé par la culture qui l'environne, celle de l'Espagne du XII^e siècle et plus généralement de l'Afrique du Nord au temps de la conquête arabe. Malgré sa difficulté à manier le latin, il était très attaché à une exacte compréhension de la pensée d'Avicenne. Aussi, pour traduire la *Logica Avicennae* a-t-il soigneusement recherché chez les auteurs latins anciens un vocabulaire précis et choisi, ce qui lui permettait d'entrer en contact par les références culturelles avec l'archevêque de Tolède en vue d'obtenir son mécénat pour une traduction d'ensemble du *Šifā'*. Mais les médiévaux n'ont pas compris cette langue étrange, pleine d'archaïsmes, qu'ils ont déformés ou remplacés par des mots de leur temps. Pour cette raison, l'archevêque de Tolède adjoignit à Avendauth/Ibn Daud Dominique Gundisalvi afin d'assurer son latin.

Cette collaboration entre le « philosophe Israélite » Avendauth/Ibn Daud et Dominique Gundisalvi, dans laquelle le premier apportait sa connaissance des textes d'Aristote et des développements de la pensée d'Avicenne auxquels le second donnait une expression latine, a fait évoluer la pensée théologique chrétienne dans un sens nouveau, plus rationnel. Par ailleurs, l'intérêt pour la pensée arabe a poussé les moines dominicains du siècle suivant à recueillir la *Logica Avicennae* qu'Albert le Grand fit fructifier jusque dans l'enseignement universitaire.

Le pari audacieux d'Abraham Ibn Daud, dit Avendauth, de faire connaître aux Latins Avicenne et plus généralement l'aristotélisme arabe, a donc pleinement réussi.

¹⁰⁵ Y. TZVI LANGERMANN, *Fragments of Commentaries on Aristotle's Physics from the David Kaufmann Genizah Collection, by Ibn Daud and Others (?)*, « Aleph », 16/1, 2016, pp. 39-60 (<http://www.jstor.org/stable/10.2979/aleph.16.1.39>).

¹⁰⁶ SIRAT, Juda B. Salomon ha-Cohen, philosophe cit., p. 43 ; R. FONTAINE, Abraham Ibn Daud and the Midrash ha-Hokhma : a Mini-Discovery, « Zutot : Perspectives on Jewish Culture », 2, 2002, pp. 156-163 ; FONTAINE, Abraham Ibn Daud cit., § 2 Biography.

ABSTRACT

The Latin Translation of the Logica Avicennae and Its Author

The *Logica Avicennae* or Latin translation of Avicenna's Commentary on Porphyry's *Isagoge* (*al-Madḥal*) in his *Kitāb al-Šifā'* or *The Cure* was presented in the second half of the 12th c. to the Archbishop of Toledo by Avendauth *Israelita*, who said then more precisely he was an *Israelita philosophus*. But who was Avendauth and how did he translate this text from Arabic into Latin?

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Is There a *versio vulgata* of Avicenna's *Kitāb al-Šifā* ? On the Hypothesis of a Double Recension of *Kitāb al-Madḥal* *

INTRODUCTION

Still too little is known of the process of redaction of Avicenna's major work concerning philosophy, namely the *Kitāb al-Šifā*. In particular, it is still a matter of investigation to determine whether the work might have undergone one or more revisions after its first composition or not. The possibility of the existence of more recensions of Avicenna's works was firstly suggested by D. Gutas for the brief treatise 'On the supernal bodies'¹, whereas the same issue was raised for the first time with regard to the *Kitāb al-Šifā* by A. Bertolacci, as a result of a survey of the manuscript tradition of the section of *Metaphysics* of the work (*Kitāb al-Ilāhiyyāt*)². More in detail, the case-study considered by A. Bertolacci concerns some differences in the arrangement of the chapters of the fifth treatise of the *Metaphysics* detected in part of the manuscript tradition and in the medieval Latin translation of the work. This observation led to the formulation of the hypothesis that two versions of the text might have existed, one of which would have been far more widespread and attested by a larger number of manuscripts (therefore named '*versio vulgata*')³.

In the present paper, I will raise the question whether Avicenna's *Kitāb al-Šifā* underwent a process of reworking after its first composition — either by the author

* *Acknowledgements*: The present paper is the provisional result of a research on the manuscripts of Avicenna's *Kitāb al-Šifā* conducted in collaboration with the ERC Project 'PhiBor – Philosophy on the Border of Civilizations. Towards a Critical Edition of the Metaphysics of Avicenna' (<http://www.avicennaproject.eu/>). I wish to thank the principal investigator of the PhiBor Project, Prof. A. Bertolacci, both for giving me access to the manuscripts' reproductions and for giving me precious comments on a previous version of this paper. I wish to thank Prof. M. Aouad as well, from whose useful comments on this paper I benefited. I also wish to thank the anonymous referees: I am really grateful for all the suggestions and the remarks I got; every shortcoming is, of course, solely my responsibility.

¹ See D. GUTAS, *The Study of Avicenna. Status Quaestionis atque Agenda*, « Documenti e studi sulla tradizione filosofica medievale », 21, 2010, pp. 45-69, esp. pp. 60-61.

² A. BERTOLACCI, *How Many Recensions of Avicenna's Kitāb al-Šifā* ?, « Oriens », 40, 2012, pp. 275-303.

³ On more recent developments of this inquiry, see the article of A. Bertolacci in the present volume.

or by the circle of his direct disciples — by taking into examination as a case-study the textual tradition of Avicenna's work concerning Porphyry's *Isagoge* (*Kitāb al-Madḥal*), which opens the section of *Logic* of the *Kitāb al-Šifā'*. Such a question arises from the observation that the twelfth-century Latin translation of the work, together with a small group of Arabic manuscripts and part of the early indirect tradition of the text, seemingly attest, concurrently to the longer version of the text preserved by the rest of the tradition, the existence of a shorter version of the text in some passages that can hardly be due to mere accidents of transmission.

In what follows, I will firstly offer an overview of the tradition of Avicenna's *Kitāb al-Madḥal* (section I), then I will focus, more in particular, on the part of the tradition witnessing a shorter version of certain passages of the work (section II). A section of the present paper shall be, then, devoted to a more in-depth analysis of the passages at stake (section III), in order to make some hypothetical suggestions concerning the possibility that they might attest the existence of a double recension of the work, and that other parts of the *summa* might hint at a similar scenario (section IV).

I. THE TRADITION OF AVICENNA'S *MADḤAL*

I.1. *The Cairo edition and the Arabic manuscript tradition of Avicenna's Madḥal*

So far, the only existing edition of Avicenna's *Kitāb al-Madḥal* is the one printed in Cairo in 1952 to celebrate Avicenna's millenary, which has the great merit of publishing this work of Avicenna's for the first time⁴. The edition is based on ten manuscripts (see Appendix A), whose selection could not be based on a critical comparison of the witnesses⁵. Four out of ten manuscripts employed for the Cairo edition are among the earliest witnesses of the work, dating to the XIIIth century, and two of these earliest witnesses are among the manuscripts that may preserve a trace of a different version of the text⁶. Unfortunately, the

⁴ IBN SĪNĀ, *al-Šifā'*, *al-Mantiq*, 1. *al-Madḥal*, edd. I. MADKŪR, Ğ. Š. QANAWĀTĪ, M. AL-ḤUḌAYRĪ, F. AL-AḤWĀNĪ, al-Maṭba'a al-Amīriyya, Cairo 1952 (henceforth: Cairo edition). On the main features of this edition, see the general introduction to the edition ('Introduction générale' / 'Muqaddimat al-Šifā'") by I. Madkūr (both in French and Arabic) and A. BERTOLACCI, *The Manuscript Tradition of Avicenna's Kitāb al-Šifā': The Current State of Research and Future Prospects*, « Oriens », 40, 2012, pp. 198-195. The same edition was, then, reprinted in Tehran in 1983 and in Beirut in 1993. Tehran lithograph edition, which antedates the Cairo edition of the *Kitāb al-Šifā'*, does not preserve the section of *Logic* of the *summa*, of which the Cairo edition is, therefore, the first printed edition at our disposal.

⁵ See on this point MADKŪR, *Introduction générale* cit., pp. 39-42, esp. p. 40.

⁶ To my knowledge, the possible existence of two different versions of the text is not taken into consideration in the Cairo edition, and the shorter version of certain passages is recorded in the apparatus as the result of an erroneous omission.

number of the manuscripts taken into account for the Cairo edition cannot be considered as entirely representative of the actual state of the textual tradition of the work, due to the huge proportions of the work's tradition.

Generally speaking, Avicenna's *Kitāb al-Šifā*⁷ can be enumerated among the works that had a huge diffusion and, consequently, a massive manuscript tradition, and the first work of the *summa*, namely the *Kitāb al-Madḥal*, is no exception. In fact, according to the provisional results of a still ongoing bibliographical research, the manuscript tradition of Avicenna's *Madḥal* amounts to at least 119 manuscripts⁷. The present survey shall take into account 59 manuscripts⁸, namely around a half of the whole estimated manuscript tradition of the work (cf. Appendix B, Fig. 1). Overall, the manuscripts taken into account range from the twelfth to the twentieth century, with a noteworthy peak of extant witnesses dating to the seventeenth century (cf. Appendix B, Fig. 2). So far, the earliest witnesses of the work at our disposal are a manuscript dating to the twelfth century (ms. Tehran, Kitābhānah-i Millī Malik 4276, dating to 536H/1142) and the twelfth-century Latin translation of the text.

1.2. The Latin translation of Avicenna's *Madḥal*

In the frame of the present inquiry, also the twelfth-century Latin translation of the work will be taken into account. This translation, that circulated under the name of *Logica Avicennae*, is seemingly the first of a larger project of translations of the *Šifā*⁷ started in Toledo by the Jewish translator Avendauth (d. ca. 1180) and

⁷ A thorough bibliographical survey of Avicenna's works is still among the *desiderata* in Avicennan studies (cf. GUTAS, *The Study of Avicenna. Status Quaestionis atque Agenda* cit., pp. 48-49). The present bibliographical research has been conducted within the frame of the ERC Project: 'PhiBor - Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the Metaphysics (*Ilāhiyyāt* of *Kitāb al-Šifā*) of Avicenna (*Ibn Sīnā*)' (<http://www.avicennaproject.eu/>). The starting point of the present survey was offered by the following inventories: G. C. ANAWATI, *Essai de bibliographie avicennienne*, Dār Al-Ma'ārif, Cairo 1950; C. BROCKELMANN, *Geschichte der Arabischen Litteratur* (GAL), voll. I-II, Brill, Leiden 1943-1949²; suppl. voll. I-III, Brill, Leiden 1937-1942 (vol. I, p. 592, suppl. Vol. I, p. 815); *Fihristvārah-i Dastnivištā-yi Īrān (Dinā)*, *The Abridged Catalogue of Iran Manuscripts*, ed. M. DIRĀYATĪ, Kitābhānah, Mūzih va Markaz-i Asnād-i Maḡlis-i Šūrā-yi Islāmī, vol. VI, Tehran 1389HŠ/2010; *Fihristgān: nuṣṣah 'hā-yi ḥaṭṭī-i Īrān (Fanḥā)*, *Union Catalog of Iranian Manuscripts*, ed. M. DIRĀYATĪ, Sāzmān-i Asnād va Kitābhānah-i Millī-i Ġumhūrī-i Islāmī-i Īrān, vol. XXI, Tehran 1390HŠ/2011; O. ERGIN, *Ibni Sina Bibliografyası*, in *Büyük Türk Filozof ve Tıp Üstadı İbn Sina, Şahsiyeti ve Eserleri Hakkında Tetkikler*, İstanbul 1937, pp. 3-80; O. ERGIN, *İbni Sina Bibliografyası*, Yalçın Matbaası, İstanbul 1956 and Y. MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i İbn-i Sīnā*, *Intişārāt-i Dānişgāh-yi Tihirān*, Tehran 1333/1954. Then, the information provided by these inventories has been, when possible, updated, specified or even sometimes corrected after the inspection of the manuscripts' reproductions.

⁸ A complete list of the witnesses taken into account, in chronological order, is provided in the Appendix A.

the philosopher Dominicus Gundissalinus (d. after 1181) in the second half of the twelfth century⁹. The importance of this translation as a witness for Avicenna's text lies in the fact that it reproduces the readings of an Arabic exemplar that, if extant, would be among the earliest witnesses of the work. Currently, the Latin translation is one of the two only witnesses dating to the twelfth century that could be taken into account for the present survey¹⁰.

The possibility itself of employing this translation as a witness for the Arabic text is due to its quite literal rendering of the Arabic wording¹¹. The Latin translation of Avicenna's *Madḥal*, which still awaits a critical edition¹², is preserved in 13 manuscripts, 7 of which preserve the passages that are taken into exam in the present paper¹³; the text of the Latin passages offered in this

⁹ On the translation movement in twelfth-century Toledo, see, among the recent contributions, C. BURNETT, *Communities of Learning in Twelfth-Century Toledo* (pp. 9-18), A. FIDORA, *Religious Diversity and the Philosophical Translations of Twelfth-Century Toledo*, (pp. 19-36), and A. BERTOLACCI, *A Community of Translators: The Latin Medieval Versions of Avicenna's Book of the Cure* (pp. 37-54), all in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning - Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*, Brepols, Turnhout 2011. On the Latin translations of Avicenna's works, see J. JANSSENS, *Ibn Sīnā (Avicenna), The Latin Translations of*, in H. LAGERLUND ed., *Encyclopedia of Medieval Philosophy. Philosophy between 500 and 1500*, Springer, Berlin 2011, Part 9, pp. 522-527. On Avendauth and Gundissalinus, see M.-T. D'ALVERNY, *Notes sur les traductions médiévales d'Avicenne*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 19, 1952, pp. 341-344 and EAD., *Avendauth?*, in *Homenaje a Millas Vallicrosa I*, Consejo Superior de Investigaciones Científicas, Barcelona 1954, pp. 35-37; M. ALONSO ALONSO, *Notas sobre los traductores toledanos Domingo Gundisalvo y Juan Hispano*, « Al-Andalus », 8, 1943, pp. 155-188; ID., *Traducciones del arcediano Domingo Gundisalvo*, « Al-Andalus », 12, 1947, pp. 295-338 and G. FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus and Practical Mathematics in Mid-Twelfth Century Toledo*, « Aleph », 16, 2016, pp. 61-106. Specifically on some features of the Latin translation of Avicenna's *Kitāb al-Madḥal*, see also S. DI VINCENZO, *Avicenna's Isagoge, Chap. I.12, De Universalibus: Some Observations on the Latin Translation*, « Oriens », 40, 2012, pp. 437-476.

¹⁰ To my knowledge, the only earlier extant witness of the text is the aforementioned ms. Tehran, *Kitābhānah-i Milli Malik 4276* (see also MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā*, p. 171).

¹¹ On the value of the Latin translations of Avicenna's *Kitāb al-Šifā'* as witnesses of the text, cf. GUTAS, *The study of Avicenna. Status Quaestionis atque Agenda* cit., pp. 49-50.

¹² An edition is in preparation by Françoise Hudry (CNRS, UPR 76, Emeritus fellow).

¹³ Namely manuscripts: Bruges, Sted. Openb. Bibl. 510 (XIII-XIV) [henceforth: B]; Graz, Universitätsbibl., 482 (XIII^{ex}) [henceforth: G]; Oxford, Merton Coll. 282 (XIVⁱⁿ) [henceforth: M]; Napoli, Bibl. Nazionale VIII.E.33 (XIII²) [henceforth: N]; Paris, BnF lat. 6443 (XIII^{ex}) [henceforth: P]; Vat. lat. 4428 (XIII²) [henceforth: U]; Vat. lat. 2186 (XIII-XIV c.) [henceforth: V]. See also A. CHEMIN, *La traduction latine médiévale de l'Isagoge d'Avicenne: notes pour une édition critique*, in *Proceedings of the World Congress on Aristotle, Thessaloniki, August 7-14, 1978*, 4 vols., Publications of the Ministry of Culture and Sciences, Athens, 1981-1983, vol. II. pp. 304-307. For a detailed description of the witnesses that preserve the passages an edition of which is provided in section III, see AVICENNA LATINUS, *Codices*, descriptis M.-T. D'ALVERNY; Addenda collegerunt S. VAN RIET, P. JODOGNE, Brill, Leiden 1995, pp. 30-34 (on ms. P); p. 75 (on ms. N); pp. 91-94 (on ms. V); pp. 99-101 (on ms. U); pp. 124-125 (on ms. B); pp. 151-153 (on ms. M); pp. 173-180 (on ms. G). On ms. V, see also J. BIGNAMI-ODIER, *Le manuscrit Vatican Latin 2186*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 11, 1938, pp. 133-166.

paper is reconstructed on the basis of all these *testimonia*¹⁴.

1.3. The early indirect tradition

The present inquiry also takes into account, as far as possible, the early indirect tradition of Avicenna's *Madḥal*; more in detail, it employs as a witness of this work the literal quotations by Abū al-‘Abbās al-Lawkarī (d. ca. 517H/1123¹⁵), reportedly a disciple of the first-generation disciple of Avicenna Bahmanyār¹⁶. According to the historiographical sources, al-Lawkarī gave impulse to the diffusion of the study of philosophy in the provinces of Khūrāsān¹⁷. Although the date reconstructed for his death is uncertain, we know from the oldest manuscript of Avicenna's *Ta'liqāt* that Lawkarī wrote the *Fihrist* (*Index*) of *al-Ta'liqāt* in 503H/1109, which leads to chronologically contextualise his activity between the second half of the eleventh and the first half of the twelfth century of the Christian Era¹⁸. One of his major works, namely the *Bayān al-ḥaqq bi-ḍimān al-ṣidq* ('Explanation of the Reality with the Assurance of Truth'), is a still partially-unedited philosophical *summa* probably employed as a teaching manual, which draws its material from Avicenna's philosophical *summae*. The section concerning Porphyry's *Isagoge*, which preserves several literal quotations

¹⁴ The translation is also preserved in an edition printed in Venice in 1508 (*Avicenne Perhypatetici philosophi ac medicorum facile primi opera in lucem redacta ac nuper quantum ars niti potuit per canonicos emendate*, Venetiis 1508), but this print is not, taken alone, an entirely reliable witness of the text, since it presents, as any other witness of the text, its own mistakes and alterations. Each time a reconstruction of the Latin text based on the manuscripts is provided in section III, the reference corresponding to the passage in the printed edition is also provided.

¹⁵ The date usually reported for Lawkarī's death, i.e. 517H/1123, was actually provided by C. Brockelmann (C. BROCKELMANN, *GAL* I, p. 602) on unknown basis; for all the problems regarding Lawkarī's chronology, see R. MARCOTTE, *Preliminary Notes on the Life and Work of Abū al-‘Abbās al-Lawkarī* (d. ca. 517H/1123), « *Anaquel de Estudios Árabes* », 17, 2006, pp. 157-133.

¹⁶ This piece of information is reported by Al-Bayhaqī (d. 565H/1169-1170), *Tatimmat ṣiwān al-ḥikma*, p. 120 Šafi'; there is, however, a chronological problem, since Bahmanyār died in 1066, so that it is difficult to imagine Lawkarī as his student: see J. JANSSENS, *Al-Lawkarī's Reception of Ibn Sīnā's Ilāhiyyāt*, in D. N. HASSE, A. BERTOLACCI eds., *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, De Gruyter, Berlin 2008, pp. 7-26. On Bahmanyār, see D. C. REISMAN, *The Making of the Avicennan Tradition*, Brill, Leiden - Boston - Köln 2002, pp. 185-195; J. JANSSENS, *Bahmanyār Ibn Marzubān: A Faithful Disciple of Ibn Sīnā?*, in D. C. REISMAN, A. H. AL-RAHIM eds., *Before and After Avicenna: Proceedings of the First Conference of the Avicenna Study Group*, Brill, Leiden 2003, pp. 177-197 and A. H. AL-RAHIM, *Avicenna's Immediate Disciples: Their Lives and Works*, in Y. TZVI LANGERMANN ed., *Avicenna and his Legacy: A Golden Age of Science and Philosophy*, Brepols, Turnhout 2009, pp. 1-25.

¹⁷ AL-BAYHAQI, *Tatimmat ṣiwān al-ḥikma*, p. 120.11 Šafi'.

¹⁸ See MARCOTTE, *Preliminary Notes on the Life and Work of Abū al-‘Abbās al-Lawkarī* (d. ca. 517H/1123) cit., pp. 134-138.

of Avicenna's *Kitāb al-Madḥal*, was edited by Ibrāhīm Dībāǧī in 1986¹⁹. As it was already noticed, Lawkarī's *Bayān al-ḥaqq bi-ḍimān al-ṣidq* often reproduces *verbatim* passages drawn both from Avicenna's own works and Bahmanyār's *Kitāb al-Taḥṣīl*²⁰. More in detail, the passages that will be taken into exam are all part of the second treatise of Avicenna's *Madḥal* (dealing with the similarities and divergences between the five universal predicables), of which Lawkarī quotes large portions directly, i.e. without drawing them from Bahmanyār's *Kitāb al-Taḥṣīl*, where they cannot be found. A comparison between the passages of Avicenna's *Madḥal* with their literal quotations in Lawkarī's work will allow us to have a clue of the readings preserved in the manuscript(s) of Avicenna's *Madḥal* that Lawkarī had at his disposal, namely a witness of Avicenna's text possibly anterior to the twelfth-century²¹.

II. IS THERE A SHORT VERSION OF AVICENNA'S *MADḤAL*?

II.1. Preliminary considerations on two possible versions of Avicenna's *Madḥal*

There are several passages in Avicenna's *Madḥal* (presented in section III) with regard to which the manuscript tradition is divided. More specifically, the divergence consists in the fact that a small bunch of manuscripts preserves, against the rest of the tradition, a shorter version of the same text. Among the 59 Arabic manuscripts that are the basis for this inquiry, 48 preserve a longer version of the text, against only 11 manuscripts that attest a short version of all or part of the passages here considered (see Appendix B, Fig. 3).

Basically, two working hypotheses can be made to explain the phenomenon: the passages with regard to which the manuscript tradition diverges can either be considered as omitted in certain manuscripts (I) or as added in others (II).

(I) According to the first hypothesis, the short version could be the result of a series of omissions, which can either be (I.1) accidental or (I.2) intentional.

(II) According to the second hypothesis, the short version could be an earlier

¹⁹ AL-LAWKARĪ, *Bayānu al-ḥaqq bi-ḍimāni al-ṣidq, Logic, Part One*, ed. I. DĪBĀǦĪ, Mu'assasa-i Intiṣārāt-i Amīr Kabīr, Tehran 1364H/1986.

²⁰ As J. Janssens pointed out, « the quotations are so literal that Lawkarī's text may be used as an independent testimony, besides available manuscripts, for the establishment of the critical edition of the respective works » (JANSSENS, *Al-Lawkarī's Reception of Ibn Sīnā's Ilāhiyyāt* cit., p. 23).

²¹ It is important to be aware that the section on Logic of Lawkarī's *Bayān al-ḥaqq bi-ḍimān al-ṣidq* is, seemingly, transmitted by a unique manuscript (ms. Tehran, Kitābhānah-i Markazī-yi Dāniṣgāh-i Tihārān 108). The critical edition is, therefore, based on one witness only, and emendations of the text had often to be made by comparing it with the sources of Lawkarī's quotations in the work (see the introduction to the edition by I. Dībāǧī, pp. 105-108). Our knowledge of the text of the section of Logic of Lawkarī's work is, therefore, quite limited and imperfect.

version, anterior to the long one which includes some textual additions and represents a '*versio vulgata*' of the text, attested by a much larger number of witnesses. The textual additions in the long version can either be the result of (II.1) the author's own reworking of the text at a second moment, or of (II.2) some later modifications of the text.

These interpretations point to two possible scenarios: (i) the divergence of the manuscript tradition is due to some accidents of transmission (hypothesis I.1), or (ii) it is due to a conscious intervention on the text, made by abridging the text (hypothesis I.2) or by developing it with the addition of further remarks and clarifications (hypothesis II).

A way to try to account for this kind of phenomenon could be supposing an accidental omission of the passages that occurred in a small part of the manuscript tradition; in this frame, the majority of the manuscript tradition would agree in preserving the complete and correct version of the text (hypothesis I.1). However, it should be noticed that an accidental omission of the passages discussed in section III is quite difficult to admit, for there are no conditions that could easily explain mechanical omissions affecting these passages²². Apparently, then, hypothesis I.1 is not a completely satisfying answer to the issue at stake.

On the other hand, the omission of these passages could be voluntary (hypothesis I.2): since the understanding of text is seemingly not affected by their omission, it could be supposed that the 'short version' is a sort of abridgement of the text, attained by trimming some non-fundamental parts off. The reason why, besides the hypothesis I.2, also the opposite and stronger hypothesis II — which considers the passages in question as added in most part of the tradition — was made is that some of these passages are quite problematic from a syntactical and doctrinal point of view. Hence, these passages could be suspected not to be included in Avicenna's text from the very first stage of composition, therefore being added in the text at a later stage of the tradition. If this were the case, then we would have a short version of the text and a long version, which is much more

²² I mean that in none of the cases that shall be displayed there are the conditions for supposing that omissions occurred because of a *homoioteleuton* or a *saut du même au même*, or by accidentally skipping a line during the process of copy (the dimensions of the clauses lacking in the short version cannot, in most cases, be reconducted to that of a single line). The hypothesis of a material damage of a common antigraph of the manuscripts attesting the short version is also quite unlikely. In the case of merely accidental omissions or material losses of a portion of text, in fact, we should expect that, at least in some cases, the intelligibility of the text is affected. In all the cases that shall be displayed, on the contrary, not only the short version of the text is perfectly intelligible, but it is sometimes even superior, from a syntactical and doctrinal point of view, to the long one.

widespread than the first one (therefore called *versio vulgata*²³) and which would actually be a revised version of the text, including several textual additions.

In what follows, I shall try to argue that there are some elements which point to the fact that the possibility (I.1) is quite unlikely, and that the idea that the textual cases that shall be displayed can be explained as the results of some accidents of transmission (i) should be perhaps left aside. I shall rather try to suggest that there was a *conscious* intervention on the text (ii), either by abridgement (I.2), or by textual addition (II); on account of the greater persuasiveness of this second possibility (ii), the short and the long versions might be considered as two different *recensions* of Avicenna's text.

II.2. *The manuscripts attesting the existence of a short version*

The Arabic manuscripts that seemingly attest the existence of a short version of the text can be classified at first according to whether they preserve a text completely lacking the passages at stake (version A), i.e. 1 extant manuscript and the model of the Latin translation, or a text only partially lacking the aforementioned passages (version B), i.e. 10 out of the 11 Arabic manuscripts. More in detail, within the witnesses of version B, it is possible to operate some further distinction, and to single out four groups of manuscripts (B.1, B.2, B.3 and B.4), characterised by the fact of sharing a selective addition or omission of the same passages.

Tab. 1. A classification of the witnesses attesting the short version²⁴

Text A (the short version)			
Latin translation by Avendauth, dat. second half of the --- 'Logica Avicennae'	XII th c.		
Ms.Leiden,Universiteitsbibliotheek, dat. before X th c. H/ Golius Or. 4 [= former 1444]	XVI th c. ms. (22) in Appendix A [henceforth: ms. G]		
Text B (a hybrid version between the short and the long versions)			
Text type (B.1) : short version of cases 1-2, 5			
Ms. İstanbul, Süleymaniye dat. Ša'bān 628H / ms. (2) in Appendix A Kütüphanesi, Yeni Câmi 772 June-July 1231	[henceforth: ms. J]		

²³ Adapting to this context the expression employed in BERTOLACCI, *How Many Recensions of Avicenna's Kitāb al-Šifā'?* cit., p. 294.

²⁴ The witnesses are listed for each textual typology in chronological order; the non-extant reconstructed witnesses are marked by the sign: °.

Ms. İstanbul, Millet Kütüphanesi (now: Millet Yazma Eser Kütüphanesi), 'Alī Emiri 1504	dat. 674H/1275-6	ms. (6) in Appendix A [henceforth: ms. E]
Ms. İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi 773	dat. 26 1041H/18 th 1 6 3 2	Ša'ibān March ms. (34) in Appendix A [henceforth: ms. C]
° The (unknown) manuscript with which ms. G was collated	unknown dat.	[henceforth: G ^{mg} .]
Text type (B.2): short version of cases 3-4		
Ms. İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3261	dat. 10 Rabī' l-awwal 677H/8 th August 1278	ms. (7) in Appendix A [henceforth: ms. T]
Ms. İstanbul, Süleymaniye Kütüphanesi, Âşir Efendi 207	dat. 680H/1281-2	ms. (8) in Appendix A [henceforth: ms. A]
° Ms. with which a lacuna in ms. Tehran, Kitābhānah-i Millī Ğumhūri-yi İslami-yi İran 1326 (dat. X/XVI c.) was corrected	unknown dat.	[henceforth: ms. M ^{mg} .]
Text type (B.3): short version of case 3		
° The ms. owned by Abū al-'Abbās al-Lawkarī (?)	dat. before XII th c.	---
° Ms. with which ms. İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi 770 (dat. 888H/1483) was collated	unknown dat.	[henceforth: ms. Y ^{i.l.} .]
Ms. Tehran, Kitābhānah-i Millī Malik 1057	dat. IX th H/XV th c.	ms. (13) in Appendix A [henceforth: ms. K]
Ms. Mašhad, Kitābhānah-i Āstān-i Quds-i Razavī 1119	dat. XI th /XVII th c.	ms. (28) in Appendix A [henceforth: ms. Q]
Text type (B.4): short version of case 5		
Ms. İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi, Hatice Sultan 208	unknown dat.	ms. (58) in Appendix A [henceforth: ms. H]

Text A. Ms. G and the Latin translation are the only witnesses that attest a short version of all the passages listed in section III (cases 1-5). Ms. G is an undated manuscript, very likely considerably earlier than the sixteenth-century

ownership statements that can be found on its title page²⁵. Besides the section of Logic of the *Šifā'*, it also preserves the Natural Philosophy and the Metaphysics. The Latin translation, on the other hand, is based on an unknown Arabic exemplar that must have been at least earlier than the second half of the twelfth century.

Text B. A first group of witnesses of text B (**text type B.1**) is composed by two thirteenth-century manuscripts (mss. JE) and by a seventh-century one (ms. C) that agree in preserving a short version of the same selected passages (section III, cases 1-2, 5). To these extant manuscripts, a reconstructed witness can be added, namely the manuscript with which ms. G was collated: in fact, a second handwriting integrates in the margins of ms. G only those passages that are also preserved by the witnesses attesting a B.1 type text (i.e. cases 3-4), apparently because the manuscript it was collated with omitted the others (cases 1-2, 5) like mss. JEC. Arguably, mss. EC are stemmatically related: more in particular, ms. C is very likely a *descriptus* of ms. E²⁶. Ms. J is a quite interesting witness, among the earliest at our disposal for Avicenna's *Madḥal*, that presents on its title page, among several other possession notes, the one allegedly written by Naṣīr al-Dīn al-Ṭūsī²⁷.

Text type B.2, namely a text attesting a short version of cases 3-4 only, has as its extant witnesses two thirteenth-century manuscripts preserved in İstanbul, namely mss. T²⁸ and A. To these two *testimonia* we can also add the manuscript with which ms. M was collated: a huge portion of text was evidently omitted in the antigraph of the manuscript (probably because of a major material damage, like the loss of a folio), then the portion omitted was reintegrated in the margins, supposedly by collation. The manuscript with which ms. M was collated, however, supposedly omitted the same portions of text omitted by mss. TA.

²⁵ For a complete codicological description of ms. G, see J. J. WITKAM, *Avicenna's Copyists at Work: Codicological Features of the Two Leiden Manuscripts of the Kitāb al-Shifā'*, « Oriens », 40, 2012, pp. 223-255, esp. pp. 225-233.

²⁶ Just to provide a few examples in support of this claim, the two manuscripts share the omission of the clause *allatī hiya iḥdā al-ḥamsa hiya* in K. *al-Madḥal*, I.14, p. 84.2-3 Cairo ed., and both manuscripts leave a blank space instead of the word *mudāwima* in K. *al-Madḥal*, I.14, p. 84.21-22 Cairo ed. Moreover, in K. *al-Madḥal*, II.4, p. 111.12-16 Cairo ed., they both have a misunderstanding of *wa-l-'araḍ al-'āmm as lā ka-l-'araḍ al-'āmm*. Ms. C, then, shows some mistakes of its own that cannot be found in ms. E, which means that ms. C is arguably a copy derived — directly or not — from ms. E.

²⁷ The ownership statement is also accompanied by a certificate claiming that the statement is really by the hand of Naṣīr al-Dīn al-Ṭūsī; see also MAHDAVĪ, *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā* cit., p. 171. It can be reconstructed from the ownership statements it preserves that ms. J was later owned by 'Abd al-Rahman Ibn 'Alī Ibn Mu'ayyad (who wrote his note, dated to the 8 Ša' bān 901H/1st May 1496, in Constantinople) and, together with a second volume reportedly completing ms. J, by a Muṣṭafā Ibn 'Abd al-Dīn Ilyās Ibn Muḥammad (on Dū l-Qa'da 960H/October-November 1553).

²⁸ Ms. T preserves the section of Logic and the first *fann* of the section of Natural Philosophy of the *Šifā'*, but the two sections were evidently copied by two different copyists. The colophon at the end of the section of Logic reports that the manuscript was copied in Baghdad in 677H/1278-9.

Finally, I call **text type B.3** the text of the manuscripts attesting a shorter version of the text for case 3 only, like mss. K and Q. Ms. K and Q are, respectively, a fifteenth-century and a seventeenth-century witnesses only preserving the section of Logic of the *Šifā*. Ms. Y, a complete fifteenth-century copy of the *Šifā*, preserves all the crucial passages that are here taken into consideration, but shows nonetheless a piece of evidence that a manuscript with which it was collated did not preserve the clause at case 3, whose beginning and end are marked in ms. Y by two interlinear signs delimiting the clause that was found absent in the manuscript employed for the collation. It can be questioned whether the manuscript that al-Lawkarī had at his disposal attested a similar text or not, for we are sure that it must have at least preserved a short version of the case 3, but whether it attested a short version of the cases 2, 4-5 as well cannot be determined.

Finally, ms. H attests a short version of the passage at case 5 (**text type B.4**), even though a marginal correction restores the long version of the text. Unfortunately, we have little information on this manuscript, which is an undated copy that only preserves the section of Logic of the *Šifā*.

This classification of the witnesses allows some preliminary considerations. Given that the hypothesis I.1 of an accident of transmission affecting the passages can be judged less likely than the others (as it will be better argued in section III), it remains the possibility of considering this division of the witnesses in the light of hypotheses I.2 and II. Assuming hypothesis I.2, text type A should be considered as the final step of a process of abridgement of the text only partially achieved in text type B. In this case, then, the short version of the work would have originated later than the long version. Assuming, on the other hand, hypothesis II, then the short version (in the form of text A) should be considered as the starting point of a process of revision of the text that ultimately resulted in the long version of the text, and of which text type B attests an intermediate stage²⁹.

²⁹ It can be suggested that the manuscripts classified as preserving a text type B in Tab. 1 attest a stage of partial integration of the textual additions within the text. This might have occurred in several ways: they could all derive from a copy attesting the short version of the text, then they could have been collated with witnesses of the long recension and, consequently, have accomplished at least a partial integration of the clauses that lacked in their antigraphs. This process is visible in ms. G, where a second handwriting adds in the margins a part of the lacking passages, arguably comparing ms. G with an exemplar that preserved a text type B.1; a copy drawn from ms. G could well incorporate in the main text the marginal addition and, therefore, presenting a text type B.1. Another possibility is that of supposing that the short and the long versions of the text both originate from a manuscript in which the textual additions characterising the long version were in the margins, and that the manuscripts of type B descend from exemplars that failed for some reasons to integrate all the additions within the text. A possible reason for such an imperfect integration could be that the additions were gradually written in the margins of the manuscript at different stages, and that copies drawn before their creation could not copy them. In the present paper, I shall not try to provide a definite answer to this problem, confining myself to ponder these possibilities.

III. THE CASES OF DIVERGENCE BETWEEN THE SHORT AND THE LONG VERSIONS

In what follows, some cases of divergence between the short and the long versions are examined more in detail. Given that in some of the cases displayed below both the short and the long versions of the passages do, apparently, perfectly fit within the context, whereas in others the clauses exclusively preserved in the long recension entail some stylistic, syntactical, or doctrinal issues, I will start by discussing the less problematic cases, to conclude with the most puzzling ones.

III.1. *Unproblematic cases (cases 1-2)*

[Case 1] *Kitāb al-Madḥal*, II.1, p. 93.1-5 Cairo ed.: «As to the properties in virtue of which the genus differs from the rest, the first of the widespread ones is that the genus is predicated of more [items] than those of which differentia, species, proprium and accident are predicated. As to the fact that the genus is more comprehensive than differentia, species and proprium, it is something evident: the proprium belongs specifically to [its] species, and so does the differentia, but according to a condition he [scil. Porphyry] didn't posit, namely that the comparison is made between the genus and the differentia ranged under it and the proprium ranged under it. As to what concerns the accident, [on the contrary], it is not self-evident [...]».

IBN SĪNĀ, <i>K. al-Madḥal</i> , II.1, p. 93.1-5	Latin translation (cf. Ven. 1508 f. 10 ^{ra})	LAWKARĪ, p. 169.10-13
<p>وأما الخواص التي يباين بها الجنس غيره، فأول المشهورات منها هو أَنَّ الجنس يحمل على أكثر مما يحمل عليه الفصل والنوع والخاصة والعرض. أمَّا أَنَّ الجنس أكثر حُويًا من الفصل والنوع والخاصة، فهو أمرٌ ظاهر؛ فَإِنَّ الخاصَّةَ تخص النوع؛ وكذلك الفصل، ولكن بشرط لم يشترطه، وهو أن يقايس بين الجنس وبين فصل تحته وخاصة تحته¹. وأما العرض فليس بينها بنفسه [...]</p>	<p>Proprietatum vero quibus differt genus¹ ab aliis, prima divulgata haec est², quia³ genus praedicatur de pluribus quam differentia et species et proprium et accidens, sed hoc quod praedicatur de pluribus quam species et differentia et proprium⁴ manifestum est: proprietates enim propriae sunt unius speciei tantum. Similiter et differentia.</p> <p>De accidente autem⁵ non ita patet per se [...]</p> <p>-----</p> <p>1. differt genus inv. U: genus om. B 2. haec est] est hic BU 3. quia] cum add. BU 4. species — proprium] differentia proprium et species in quantum BU 5. de accidente autem] de accidente vero BU</p>	<p>وأما الخواص التي يباين بها الجنس غيره، فأول المشهورات منها هو أَنَّ الجنس يحمل على أكثر مما يحمل عليه الفصل والخاصة³ فأمرٌ ظاهر؛ فَإِنَّ الخاصَّةَ تخص النوع؛ وكذلك الفصل، ولكن بشرط لم يشترطه، وهو أن يقايس بين الجنس وبين فصل تحته وخاصة تحته. وأما العرض فليس بينها بنفسه [...]</p>

1. om. ولكن — تحته. EGJC (add. in mg. J)

^a Seemingly, a *saut du même au même* due to the repetition of *al-ḥāṣṣa* affected Lawkarī's text.

[Case 2] *Kitāb al-Madḥal*, II.2, p. 99.3-7 Cairo ed.: «But in this divergence another feature is negated from the species, namely that it is not univocally [and] universally predicated of the genus, and this [feature] negated doesn't correspond to that [feature] affirmed, but the form of this divergence is that the species is not compared with the genus in what the genus [has] with respect to the species, and this is only possible between different [things]. Then, another divergence [...]».

IBN SĪNĀ, *K. al-Madḥal*, II.2, p. 99.3-7Latin translation
(cf. Ven. 1508 f. 10^{vb})

بل إنما تسلب عن النوع في هذه المبينة صفة
أخرى، وهي أنه لا يحمل على الجنس بالتواطؤ
حملا كلياً، وليس هذا المسلوب هو ذلك
الموجب، لكن صورة هذه المبينة أن النوع لا
يكافئ الجنس فيما للجنس عند النوع، وهذا لا
يتأتى إلا بين مختلفين¹. ومبينة أخرى [...]]

[Hoc autem non negatur a specie
secundum hunc modum] sed aliter,
scilicet¹ quia non praedicatur de genere²
univoce et universaliter³, hoc autem⁴
negatum non est illud⁵ affirmatum.
Forma vero huius differentiae⁶ haec est,
quod species non est par generi⁷ in eo
quod habet genus erga species. Item
alia differentia [...]

om. EGJC وهذا — مختلفين¹.

1. scilicet om. BU || 2. scilicet add. BU || 3.
univoce et universaliter inv. BU || 4. hoc autem]
si autem M : autem om. BU || 5. non est illud] ad
BU || 6. huius differentiae om. BU || 7. est par
generi] pars generis BU

Cases 1-2. Among the cases of divergence between the short and the long versions of Avicenna's *Madḥal* here presented, there are at least two (cases 1-2) in which the two versions both produce two unproblematic texts, with the only difference that the long version preserves some further remarks that are absent in the short one. In both cases, the short version is represented by four extant Arabic manuscripts (mss. EGJC) and the twelfth-century Latin translation; in the only case in which a comparison with Lawkarī's *Bayān al-ḥaqq bi-ḍimān al-ṣidq* is possible (namely case 1), Lawkarī's text sides with the long version.

In case 1, the long version adds a condition that is not explicit in the text of the short version, namely that the comparison between the genus and the other predicables regarding their extension in predication is made by taking into account only the predicables that are ranged under the genus in Porphyry's tree (i.e. the predicables that are not more general than it). This idea, which is implicitly acknowledged in the short version, is overtly stated in the long one. In case 2, the long version adds the specification that a comparison of the kind proposed in the text is only possible between two different things.

The absence in the short version of the clauses preserved in the long version can hardly be explained as the result of a mere accident of transmission (hypothesis I.1): as omissions, in fact, they are quite macroscopic, and there are not the conditions to suppose that they could have been easily accidentally omitted during the copy (for instance, because of a homoioteleuton or a *saut du même au même*, or by accidentally skipping a line during the process of copy). Noteworthy, neither the syntax nor the content of the text are affected by these omissions.

Seemingly, there are not compelling reasons that might have led to the voluntary suppression of the clauses in cases 1 and 2 (hypothesis I.2), since apparently there is no problem in keeping the two clauses as part of the text, and it is a bit difficult to imagine why one could have wanted to cut off some further clarifications he found in Avicenna's text. On the other hand, there are no specific reasons to suspect that the clauses that are absent in the short version could be the result of a later addition in the long version (hypothesis II).

Given that the presence or absence of these clauses does not affect the text neither from a syntactical, nor from a doctrinal point of view, the nature of the divergence between the short and the long version can hardly be judged on the basis of these first two cases.

III.2. A slightly problematic case (case 3)

[Case 3] *Kitāb al-Madḥal*, II.1, p. 91.8-12 Cairo ed.: «Let's start with the common features, and say that the one that is common to [all] the five [predicables] is that they are universal, i.e. predicated of many [items]. If the author of *al-Madḥal* [Isagoge?] acknowledged this [point], then he already acknowledged the defect of the descriptions belonging to differentia, proprium and accident, since he forgot to mention universality in them. All of them [i.e. the predicables] share something else too [...]

IBN SĪNĀ, K. <i>al-Madḥal</i> II.1, p. 91.8-12	Latin translation (cf. Ven. 1508 ff. 9 ^{vb} -10 ^{ra})	LAWKARĪ, p. 167.3-4
[...] ولنبدأ بالمشاركات، فنقول إنّ المشاركة التي تعم الخمسة هي أنها كلية أي مقولة على كثيرين. وإذا اعترف بهذا مُصنّف المدخل، فقد اعترف بنقص الرسوم التي للفصل والخاصة والعرض، إذ أغفل فيها ذكر الكلية ¹ . وتشترك جميعها في شيء آخر [...]]	[...] Et ¹ incipiemus a communitatibus, dicentes quod communitas in qua conveniunt haec quinque ² est haec, scilicet quod universalia sunt, id est ³ praedicabilia de pluribus. Sed omnia conveniunt in alio [...]. ----- 1. et om. BU 2. haec quinque om. BU 3. id est om. BU	نقول إنّ المشاركة التي تعم الخمسة هي أنها كلية أي مقولة على كثيرين. وتشترك جميعها في شيء آخر [...]]
----- om. وإذا الكلية ¹ . TGQAKHY ^{i.l.} add. in mg. G ²		

Case 3: a critical reference to Porphyry. A bit more revealing, though still not an extremely problematic one, is case 3. More precisely, the sources for the short version are, in this case, five preserved Arabic manuscripts (mss. TGQAK), a reconstructed Arabic manuscript (the one with which ms. Y was collated), the twelfth-century Latin translation and the early indirect tradition (a literal quotation in Lawkarī's *Bayān al-ḥaqq bi-ḍimān al-ṣidq*), whereas the rest of the tradition attest the long version of the passage. Again, hypothesis I.1 appears as the less attractive: in this case, the short version would have accidentally omitted a quite long passage, but it is difficult to find a convincing explanation of the genesis of such an omission.

The clause lacking in the short version comments upon the first feature shared by all the five universal utterances introduced by Porphyry, namely that, insofar as they are universal, they are all predicated of many items³⁰. The clause at stake, more in particular, claims that since 'the author of *Madḥal*' (*muṣannif al-Madḥal*) admits this point, then he also admits that the descriptions of the five universals provided before are defective, since they omit the mention of universality. The mention of a *muṣannif al-Madḥal* in the passage (p. 91.8-12 Cairo ed.) is quite odd for two main reasons: (i) first, the clause *muṣannif al-Madḥal* is, in itself, peculiar, if compared to the *usus scribendi* of Avicenna. (i.a) This occurrence of the term *muṣannif* would be the only one that could be found in Avicenna's works, for it is never employed elsewhere by Avicenna, and (i.b) if we take this expression as referring to Porphyry, the mention of Porphyry's *Isagoge* as '*al-Madḥal*' would be quite unusual for Avicenna, who usually refers to that work as *Īsāgūḡī*³¹. Although it cannot be definitely excluded that Avicenna might have chosen to refer once to Porphyry's *Isagoge* as *Madḥal*, it is nonetheless quite a remarkable exception. (i.c) Generally speaking, Porphyry is rarely referred to in such an explicit manner by Avicenna's part, especially in *Madḥal*; in fact, he is explicitly mentioned as *ṣāḥib Īsāgūḡī* ('the author of the *Isagoge*') in *Madḥal*, I.13 (p. 80.12 Cairo ed.) and in *Iṣārāt*, II.11 (p. 220.11 ed. Dunya) but, more often, he is simply referred to as *al-raḡul* ('[this] man')³² or by means of periphrases³³.

³⁰ PORPH., *Isag.*, p. 13.10-21 Busse.

³¹ Probably, also to distinguish Porphyry's work from his own reworking of it (preferably named *Madḥal*); for Porphyry's *Isagoge* referred to as *Īsāgūḡī*, see *Nafs*, I.1, p. 9.9; V.6, p. 213.2 ed. Madkūr; *Ġadal*, I.6, p. 57.8; p. 62.13 ed. Madkūr; as *Kitāb Īsāgūḡī: Burhān*, II.2, p. 130.18 ed. 'Afīfī; *Ġadal*, I.6, p. 62.3-4; 14-15 ed. Madkūr.

³² Cf. *Madḥal*, II.2, p. 100.7, 11; p. 102.11; p. 103.4 Cairo ed. and *Madḥal*, II.3, p. 106.7 Cairo ed.

³³ Porphyry is referred to as *awwalu man qaddama ma 'rifata ḥādīhi l-ḥamsati 'alā l-manṭiqi* ('the first who made the knowledge of these five [universal utterances] precede the Logic') in *Madḥal*, I.14 (p. 86.5 Cairo ed.); as *awwalu man afrada li-ḥādīhi l-ḥamsati l-kullīyyāti kitāban* ('the first who devoted a book to these five universals') in *Madḥal*, II.3 (p. 109.5-6 Cairo ed.) and as *man qaṣada taqḍīm ḥādā l-kitāb* ('who aimed at making this book precede [Aristotle's Logic]') in *Madḥal*, I.13 (p. 77.9 Cairo ed.).

Hence, a reference to Porphyry as *muṣannif al-Madḥal* seems quite unusual for Avicenna, if compared to the usual lexicon employed by the author (i.a-b) and to the usually indirect way in which he mostly refers to Porphyry (i.c).

(ii) Secondly, it is true that Avicenna must be referring to Porphyry when presenting the first feature shared by the five universal utterances, though not explicitly ascribing it to him; it should be noticed, however, that he speaks in a quite general way of a plurality of philosophers, claiming that he will confine himself to what *they mentioned* (p. 91.8: *wa-l-naqṭaṣir 'alā mā awradūhu minhu*). The abrupt shifting between a plural and generic reference (*awradū*, 'they mentioned') to a very specific singular one (*wa-iḏā 'tarafa bi-hādā muṣannif al-Madḥal*, «and since the author of *Madḥal* admitted this...») that we find in the passage seems quite out of place from a stylistic point of view, especially given that *all* the other critical references in the chapter, though evidently referred to Porphyry, are expressed by means of generic plural references³⁴.

In spite of these minor stylistic difficulties, however, the presence of the clause at stake does not entail any major syntactical or doctrinal problem within the context. So far, then, there is too scarce evidence to tell whether the clause was part of the text from its first redaction (and then intentionally omitted, according to hypothesis I.2) or it was rather added to it at a second moment (hypothesis II). In what follows, on the other hand, two more problematic cases shall be presented, in which syntactical and doctrinal issues arise in the attempt of verifying the consistency of the clauses absent in the short version with the context.

III.3. Problematic cases (cases 4-5)

[Case 4] *Kitāb al-Madḥal*, II.2, p. 101.7-9 Cairo ed.: «And this divergence subsists between the genus and the permanent and common proprium, or between the two natures of genus and proprium unrestrictedly, since that [nature] is not a subject of predication, whereas this one is, I mean this convertibility. [Another] divergence encompassed [in it] follows this one [...]».

³⁴ Just to provide a few examples closely following the passage at stake, cf. p. 92.4: *wa-qad mātṭalū* («they already exemplified»); p. 92.5: *fa-lam yuḥsinū fī irādihim hādā l-miṭāl* («they weren't right in introducing this example»); p. 92.7: *'indahum* («according to them») and *lam ya'nū* («they didn't mean»).

IBN SİNĀ, <i>K. al-Madḥal</i> , II.2, p. 101.7-9	Latin translation (cf. Ven. 1508 f. 11 ^{ra})
<p>وهذه المبينة بين الجنس والخاصة الدائمة العامة، أو بين طبيعتي الجنس والخاصة مطلقاً؛ إذ تلك لا تحتل وهذه تحتل¹، أعني هذا العكس². ويتبع هذه مبينة هي في ضمن تلك [...]]</p>	<p>Haec autem differentia est inter genus et proprium commune substantiale*. Post hanc autem sequitur¹ alia differentia quae continetur in ea [...]</p> <p>----- 1. sequitur] sequetur BU</p> <p>----- * Substantiale] fort. legit dātiyya pro dā'ima</p>
<p>----- أو بين — 2. JCE^{s1}G² قد تحتل [تحتل. 1. العكس om. TM^{mg}GA add. in mg. G²</p>	

Case 4 : the counterpredication of propria. In this case, the clause with regard to which the two versions diverge is omitted by the Latin translation and by the manuscripts of type A and B.2 (see Tab. 1 above), against the rest of the tradition. The context in which the possibly suspected passage is located is Avicenna's commentary to Porphyry's statement that « a proprium is counterpredicated of that of which it is a proprium, a genus is not counterpredicated of anything »³⁵. Porphyry's statement means that the proprium applies to what the species of which it is predicated applies to and conversely, whereas the case of the genus with respect to its species is different³⁶. Avicenna seems to propose, at a first stage, a restriction of the validity of the statement to those propria that are permanent and common to all of their subjects. The reason for such a restriction lies in Porphyry's individuation of four kinds of proprium, of which only the last one — namely the proprium always and commonly belonging to its species — is finally said to be 'proprium' in the proper sense meant in logic³⁷. Arguably, Avicenna wanted to prevent the inference that the kind of proprium that doesn't always belong to its species, or not to all of it, can be counterpredicated as well, because this holds true only if it belongs to the species and only for the members of the species to which it belongs.

³⁵ PORPH., *Isag.*, p. 16.11-14 Busse.

³⁶ Two things are said to 'counterpredicate' (gr. ἀντικατηγορεῖσθαι) when the one applies to everything the other applies to and conversely. Two examples of counterpredication are that of the thing and its definition (e.g. 'human' and 'rational animal', since every human is a rational animal and every rational animal is a human) and that of the thing and its proprium (e.g. 'human' and 'capable of laughing', since every human is capable of laughing and every being capable of laughing is a human). The genus and each one of its species do not counterpredicate, because the genus applies to more items than those each one of its species applies to (e.g. 'animal' and its species 'human', since every human is an animal, but not every animal is a human).

³⁷ PORPH., *Isag.*, p. 12.13-22 Busse.

Interestingly, the suspected clause is a sort of correction to Avicenna's own restriction, stating that Porphyry's statement might be considered as valid for the natures of proprium and genus in general (*muṭlaqan*), i.e. without any further specification, since the proprium can be counterpredicated (in case it permanently belongs to all the individuals of the species of which it is predicated), whereas the genus never can³⁸. From a doctrinal point of view, the suspected passage seemingly represents a shift within Avicenna's first intention to confine the validity of Porphyry's statement to a certain kind of proprium. From a syntactic point of view, the last part of the relevant passage is rather problematic: in fact, it is quite difficult to understand the passage *a 'nī hādā l- 'aks* («I mean this convertibility») within the structure of the clause, from which it appears to be detached.

[Case 5] *Kitāb al-Madḥal*, II.1, p. 93.5-11 Cairo ed.: «As to what concerns the accident, it is not in itself evident that it is necessary [for it] to have a minor extension than the genus; this because the properties of the ten categories, that we will mention later, are common accidents to the categories' species, therefore being not minor in extension than the genus, on the contrary, among them there is what is more common and greater [in extension], like the fact that substance is established according to a unique definition in a way that it doesn't undergo more and less, is more common than substance. If someone says that this is a negation, and that no meaning is under it, it is still possible for us to find concomitants and accidents that are more common than each category, as one and existent, or as created, or like motion, for it is greater [in extension] than the rational animal which is, according to him (scil. Porphyry), a genus for 'man'. The second divergence [...]».

³⁸ Certain manuscripts preserve a *qad* before the verb *taḥtamilu* ('is predicated') referring to the nature of the proprium: the *qad* conveys, in this context, a potential meaning, so that it should be understood: «whereas this one [namely the nature of the proprium] *could be/sometimes* is counterpredicated».

IBN SİNĀ, *K. al-Madḥal* II.1, p. 93.5-11Latin translation
(cf. Ven. 1508 f. 10^{ra})

وأما العرض فليس بينا بنفسه أنه يجب أن يكون أقل من الجنس، وذلك أن خواص المقولات العشر التي نذكرها بعد هي أعراض عامة لأنواعها، وليست أقل من الجنس في عمومها، بل منها ما هو أعم وأكثر، كما أن كون الجوهر ثابتا على حد واحد فلا يقبل الأشد والضعف هو أعم من الجوهر. فإن قال قائل: إن هذا سلب، وليس تحته معنى، فقد يمكننا أن نجد لوازم وعوارض أعم من مقولة مقولة، كالواحد والوجود، بل كالحادث، بل مثل الحركة فإنها أكثر من الحيوان الناطق، وهو جنس عنده للإنسان. والمباينة

الثانية [...]]

1. — الإنسان. om. EGJC om. et add. in mg. H

De accidente autem¹ non² ita patet per se an debeat esse minus genere. Proprietates enim decem praedicamentorum de quibus postea loquimur³ sunt accidentia communia⁴ speciebus eorum, et non sunt inferiores generibus⁵ in sua communitate. Est autem quaedam ex illis⁶ communior et maior⁷, sicut hoc⁸ quod substantia est ita⁹ fixa quod non recipit magis et minus: hoc enim communior est¹⁰ quam substantia. Si autem quis¹¹ dixerit quod haec negatio est¹², quae non continet intentionem aliquam¹³, possumus invenire comitantia et accidentia quae sunt communiora unoquoque praedicamentorum, sicut est unum et¹⁴ ens, et sicut incipere vel¹⁵ fieri*. Differentia autem secunda [...]

1. de accidente autem] de accidente vero BU : autem om. V || 2. non] quod G || 3. de quibus — loquimur om. BU || 4. de quibus postea loquimur add. BU || 5. generibus] genere BU || 6. ex illis] ex istis BU || 7. communior et maior] maior et communior BU || 8. sicut hoc om. BU || 9. est ita inv. MNPG || 10. est om. BUM || 11. quis om. BU || 12. est om. BUMNP || 13. aliquam] quicquam BU || 14. et om. BU || 15. vel] et BU

* sicut incipere vel fieri] duplex translatio : ar. ka-l-muḥdat

Case 5: the example of ‘motion’. The passage aims at demonstrating that the accident has not always a minor extension in predication than the genus; the first instance mentioned is that of a feature such as the fact of not undergoing more and less, which belongs to more than just one of the highest genera (for it belongs to the category of substance as well as, for instance, to the category of quantity), therefore having a wider extension of predication than a genus. Then, Avicenna imagines a possible objection to the example he provided, namely that the feature mentioned (‘not undergoing more and less’) is, actually, the negation (*salb*) of a feature rather than a feature. In order to avoid such an objection,

Avicenna mentions the case of some concomitants and accidents that are more general than each category, like 'one' (*al-wāḥid*), 'existent' (*al-mawjūd*) and 'created' (*al-muḥdaṭ*). As to 'one' and 'existent', they are the two transcendental notions predicated of all the categories³⁹; as to the term 'created', it is arguably a notion that can be applied to all the items that are classified in the categories as well. In fact, it should not be taken as if it just applied to non-eternal items (to the exclusion, therefore, of the eternal substances): in fact, by the term *muḥdaṭ*, Avicenna qualifies any item that is *essentially* — not temporally — posterior to the Necessary Existent⁴⁰, hence the term can be predicated of all items other than the Necessary Existent himself⁴¹. As is evident, the whole argumentation is set at the level of the highest genera, since once it is demonstrated that a certain accident is more common than a single summum genus, no other genus with a wider extension of predication can be found to object that the accident has, however, a smaller extension of predication than that other superior genus.

Problems arise when one tries to explain the mention of 'motion' (*al-ḥaraka*) that is brought in by the suspect passage within this frame. In fact, 'motion' seemingly doesn't fit well in this list of examples both for linguistic and doctrinal reasons: (i) first of all, it is the only name within a list of adjectival attributes, which is quite strange; (ii) secondly, it is doubtful how to understand the term 'ḥaraka' in this context.

(i) As to the linguistic peculiarity of the mention of 'motion' within the passage, it won't be taken as a decisive argument to rule out the possibility that

³⁹ Cf. IBN SĪNĀ, *Ilāhiyyāt*, III.2, p. 103.7-9 Cairo ed.: « The one may correspond with the existent in that the one, like the existent, is said of each one of the categories. But the meaning of the two differs, as you have known. They agree in that neither of them designates the substance of anyone thing. This you have known » (Transl. M. E. MARMURA, *Avicenna, The Metaphysics of the Healing*, Brigham Young University Press, Provo, Utah 2005, p. 79).

⁴⁰ IBN SĪNĀ, *Ilāhiyyāt*, VIII.3, pp. 342.17-343.6 Cairo ed.: « Everything is originated (*ḥādīt*) from that One, that One being the originator (*muḥdiṭ*) of it, since the originated (*al-muḥdaṭ*) is that which comes into being after not having been. If this posteriority were temporal, then the antecedent precedes it and ceases to exist with its origination. The [antecedent] would, hence, be described as something that was before and is now no more. Hence, nothing would have become disposed to become originated unless there had been something before it that ceases to exist by its coming into existence. Thus, origination from absolute nonexistence — which is creation — becomes false and meaningless. Rather, the posteriority here is essential posteriority. For, the state of affairs that a thing possesses from itself precedes that which it has from another. If it has existence and necessity from another, then from itself it has nonexistence and possibility. Its nonexistence was prior to its existence, and its existence is posterior to nonexistence, [involving] a priority and posteriority in essence. Hence, everything except the First One, comes to exist after not having been, in virtue of what it itself deserves » (Transl. MARMURA, *Avicenna, The Metaphysics of the Healing* cit., pp. 272-273, slightly modified).

⁴¹ It is worth recalling that, for the mature Avicenna, God is neither a substance nor an accident and, therefore, exceeds the ten categories.

it is actually part of the text, since it could also be admitted as a loose way to mean *al-mutaḥarrik*.

(ii) More challenging is the doctrinal issue. We should expect, in the passage, another example of a concomitant more general than each category (which is indeed the case of ‘one’, ‘existent’ and ‘created’, as previously argued); ‘motion’, however, seemingly doesn’t satisfy this requirement, in Avicenna’s view.

Avicenna provides a definition of ‘motion’ in the first chapter of the second treatise of the *Physics* of the *Šifā*⁴², and a discussion of its categorial status in the second chapter of the same treatise⁴³, to which I will come back shortly. In the section corresponding to the *Categories*, Avicenna criticizes a group of philosophers who believe that motion is a genus external to the ten categories, encompassing the categories of quality, quantity and place (T1).

T1. IBN SĪNĀ, *Maqūlāt*, II.4, p. 70.5-13 Cairo ed.

« Here there occur some doubts concerning some things that are said to exist out of these ten [categories], without being included in them, among which there are things that are more common than a number of them, like motion, for it encompasses the [categories of] quality, quantity and place in a way. [...] Let’s say: as to motion, [(a)] if it coincides with the category of passion, then it doesn’t add a genus [to the ten categories]; [(b)] if, [on the contrary], it doesn’t coincide with the category of passion, it is not necessary for it to be a genus; rather, it is necessary for it to be predicated of its kinds by ambiguity (*bi-l-taškīk*), and that this [element] is what prevents to consider motion as the category of passion itself, in case it is impossible. Otherwise, if there isn’t anything of this sort preventing [it], then the category of passion is motion itself, but [our] discourse will come back to it in its [proper] place ».

In the passage, Avicenna refutes the idea, endorsed by a group of philosophers, that motion could be considered as a genus encompassing more

⁴² See A. HASNAWI, *La définition du mouvement dans la Physique du Šifā’ d’Avicenne*, « Arabic Sciences and Philosophy », 11, 2001, pp. 219-255. As well underlined by Hasnawi, two senses of ‘motion’ are distinguished by Avicenna in this chapter, namely a motion that is the conceived continuity of the process of motion, from the very beginning to the end (the ‘mouvement-1’ described by Hasnawi) and a motion which is the intermediary state of the mobile subject between the beginning and the end of the process (‘mouvement-2’ in Hasnawi’s article). The most proper sense of ‘motion’ is, according to Avicenna, the second one, which is also the only one having an extra-mental existence (whereas the first one is just the mental conception of the whole process of motion, and does not exist in the external reality).

⁴³ See A. HASNAWI, *Le statut catégorial du mouvement chez Avicenne: contexte grec et postérité médiévale latine*, in R. MORELON, A. HASNAWI eds., *De Zénon d’Élée à Poincaré - Recueil d’études en hommage à Roshdi Rashed*, Éditions Peeters, Louvain - Paris 2004, pp. 607-622.

than one category by prospecting two alternatives, namely that (a) motion coincides, in fact, with the category of passion, and (b) that it doesn't coincide with that category, though without being a genus, since in that case it would be predicated of its kinds by ambiguity (*bi-l-taškik*). The whole argument does not deal extensively with the categorial status of motion (which, in fact, is postponed to the pertinent section of *Physics*); its purpose is rather that of rejecting the idea that motion could be an additional genus to the ten categories. Nonetheless, Avicenna already hints in the passage at what he more extensively explains in the section of *Physics*, namely that motion coincides with the category of passion, which is the only possibility he takes into account for the hypothesis (a), according to which motion fits within the system of the categories. In fact, in *Al-Samā' al-Ṭabī'ī*, II.2 (T2), Avicenna introduces three views concerning the problem of how motion fits within the categories.

T2. IBN SĪNĀ, *Al-Samā' al-Ṭabī'ī*, II.2, p. 93.4-8 ed. Zayed⁴⁴

« There has been a disagreement about motion's relation to the categories. Some said (i) that motion is the category of passion, while others said (ii) that the term 'motion' applies purely equivocally to the kinds that fall under it. Still others said (iii) that the term 'motion' is an analogical term like the term 'existence', which includes many things neither univocally nor purely equivocally, but analogically; however, the kinds primarily included under the terms 'existence' and 'accident' are the categories [themselves], whereas the kinds included under the term 'motion' are certain species or kinds of the categories ».

The whole chapter is basically devoted to the refutation of the second and the third views, in favour of the first one⁴⁵. Hence, if we took 'motion' in case 5 as an adequate example of something more general than a single category like 'existence' and 'oneness', then, we should admit within this text a non-Avicennan view.

There are some further elements pointing at the fact that 'motion' is not taken as something which exceeds a single category in the context of the passage in case 5. In fact, the reason provided in the clause mentioning 'motion' is, actually, that it is more general than the rational animal, which is a genus of man, which seems to definitely rule out the possibility that this clause is

⁴⁴ Translation in J. MCGINNIS, *Avicenna, The Physics of the Healing, Books I and II*, Brigham Young University Press, Provo, Utah 2009, p. 128, modified. See also the French translation of the passage in the aforementioned HASNAWI, *Le statut catégoriel du mouvement chez Avicenne*, p. 615.

⁴⁵ IBN SĪNĀ, *Al-Samā' al-Ṭabī'ī*, II.2, p. 97.13-15 ed. Zayed: « Since the theories that we have displayed [so far], but not accepted, have been invalidated, there remains the truth uniquely, namely the first theory ».

referring to ‘motion’ as something more general than a single category. It is very likely that ‘motion’ has to be intended, in this context, as a quite sloppy way to mean ‘moving voluntarily’ (*mutaḥarrīk bi-l-irāda*). In this sense, the example could somehow have a relation to the general context of the passage, inasmuch as ‘capable of moving’ is an instance of a concomitant feature that is more general than a genus, though not a highest one (i.e. not a category): it is an example of common accident already provided by Porphyry in the *Isagoge*⁴⁶ and elsewhere recalled by Avicenna himself⁴⁷. In this sense, though, the example of ‘motion’ provided in the suspect clause seems to be out of place, since the list of examples formed by ‘existent’, ‘one’ and ‘created’ is meant to exemplify the case of accidents and concomitants that are more universal than the highest genera. Moreover, not only these examples, but the whole argumentation is built around the highest genera: one of the first examples provided is that of ‘not undergoing more or less’ (p. 93.8), which is a feature common to more than one category⁴⁸. The argument of the suspect passage, on the other hand, being built on an intermediate genus placed at a lower level of an ideal Porphyry’s tree, is less convincing and definitive than Avicenna’s previous argument, because one could still object to it that there are higher genera that have a greater extension in predication than that concomitant feature, whereas it is impossible to move such an objection if the whole argument is brought at the level of the highest genera.

To conclude, no matter in which sense we understand the term *ḥaraka* — i.e. as motion in general or, as the suspect passage itself suggests, as the capability of moving voluntarily —, the example turns out to be quite out of place in the specific argumentation, although possibly somehow related to the general subject of the passage.

⁴⁶ PORPH., *Isag.*, p. 13.18–21 Busse: « Black [is predicated] both of the species of ravens and of the particulars, being an inseparable accident, moving (τὸ κινεῖσθαι) of man and horse, being a separable accident — but principally of the individuals and also, on a second account, of the items which contain the individuals » (Tr. J. BARNES [tr. and comm.], *Porphyry, Introduction*, Clarendon Press, Oxford 2003, pp. 12–13).

⁴⁷ It can be found as an example for common accidents in the early work *K. al-Hidāya* and in the *Dānešnāme-ye ‘Alay’i*: IBN SĪNĀ, *K. al-Hidāya*, p. 67 ed. ‘Abduḥ: « As to the common accident, it is an accidental [feature] either encompassing [several] species, like ‘white’ for ‘snow’ and ‘gypsum’, or the individuals of [several] species, like ‘moving’ (*ka-l-mutaḥarrīk*) »; IBN SĪNĀ, *Dānešnāme-ye ‘Alay’i*, pp. 24–25 ed. Mo‘īn-Meshkāt: « [As to the accidental universal, either it belongs to one universal] or it belongs to more than one universal, like motion [belongs] both to man and to something else, and like blackness [belongs] both to raven and to something else. They call this: ‘common accident’ ».

⁴⁸ Substance and quantity, for instance.

IV. HOW MANY RECENSIONS OF THE *ŠIFĀ*?IV.1. *Some observations on the double recension of Madḥal*

To sum up, it can be stated that the passages regarding which the manuscript tradition is divided cannot be easily dismissed as accidental omissions affecting the short version (hypothesis I.1). In some of the cases presented (cases 1-2), it can hardly be established whether the divergences between the short and the long versions are due to an intentional omission of the passages in the short version (hypothesis I.2) or to additions in the long version (hypothesis II), for the passages at stake are apparently both syntactically and doctrinally consistent with the context.

Although it is still possible to claim that the text might have undergone a process of abridgement, this hypothesis is, however, insufficient to explain the stylistic, syntactical and doctrinal issues raised by part of the passages taken into account (cases 3-5). In trying to analyse these cases in the light of hypothesis I.2, in fact, a major difficulty appears, namely that of accounting for the lack of syntactical and doctrinal homogeneity of the first version of the text. In other terms, it is difficult to explain how the problematic passages could fit within the context, if they were meant to be part of the text in the first place. Such difficulties would be, on the contrary, more easily solved by considering the passages at stake as absent at a first stage of the composition and added at a second moment (hypothesis II). In such a frame, the passages were not originally meant as parts of the text, but rather as marginal remarks, that then became fully part of a *versio vulgata* of Avicenna's text, being copied within the text at a quite early stage of the tradition. A *terminus ante quem* for at least a partial inclusion of the textual additions within the text is provided by Lawkarī's quotations, which grant that at least a part of these textual additions could already be read in his copy of the *Šifā* (cf. case 1). It can be claimed that the process of revision and enlargement of the text antedates all the extant Arabic manuscripts preserving Avicenna's *Madḥal* of which we have knowledge so far: it appears to be completely achieved in the earliest extant Arabic manuscript of the text at our disposal, namely ms. Tehran, Kitābhānah-i Millī Malik 4276, dating to the first decade of Dū l-Ḥiġġa 536H/4th-13th July 1142. The incorporation of these passages within Avicenna's text was, therefore, already active at a very early stage of the transmission, which could explain why more than the 80% of the extant manuscript tradition agree in preserving the textual additions.

The possibility of considering these passages as the result of some textual additions raises the question concerning the author of the textual additions. Virtually, there are three possible answers: (II.1) first, these additions might

result from Avicenna's own afterthoughts on his own text; (II.2.a) secondly, they might be modifications of Avicenna's text made by some of his early disciples: in these two first cases, the interpolations would reveal some precious information about the *compositional* and *editorial* process of the text. (II.2.b) Thirdly, they might be a copyist's addition: in the latter case, they would tell us something about the *transmission* of the text. I would suggest that the third hypothesis (II.2.b) is less likely, because of the nature of such interpolations and because of their huge and quite early diffusion. Once put aside the possibility that the interpolations are the result of a scribal intervention, there remains the possibility that they are either later interventions by Avicenna (II.1) or further remarks by his disciples (II.2.a).

IV.2. *Is there a double recension of other sections of the Šifā'?*

As to what concerns Avicenna's method of composition and preservation of his works, we dispose of some coeval testimonies that might be put in relation to the textual evidence provided by the manuscript tradition. Avicenna's disciple and secretary Abū 'Ubayd al-Ğūzğānī⁴⁹ offers us, in his prologue to the *Šifā'* (T3), an insight into the starting point of the manuscript tradition of Avicenna's works, namely the moment in which a first clean copy is drawn from the author's one.

T3. ABŪ 'UBAYD AL-ĞŪZĞĀNĪ, *Prologue to the Šifā'*, p. 2.5-7 Cairo ed.⁵⁰

« As to him [i.e. Avicenna], he was not used to keep a copy (*an yaḥzuna nushatan*) for himself, as well as he was not used to write down a copy from the holograph (*an yuḥarrira min al-dustūr*) or to draw a copy from the draft (*aw an yuḥriğa min al-sawād*), but he would just dictate or make [someone else] write the copy (*al-nuṣṣa*) and give it to the one who had requested it from him ».

The importance of this passage should not be underestimated, since it allows us to determine a precise turning-point within Avicenna's production, coinciding with his encounter with al-Ğūzğānī in Ğurğān (403-4H/1013-4). Al-Ğūzğānī reports in T3 that, before he became Avicenna's secretary, Avicenna did not retain copies of his own works for himself, but he usually gave the single copy of the work to the people who commissioned it. This means that the manuscript tradition of the works composed before a certain phase of Avicenna's career very likely depends on a unique copy that must have not undergone any other

⁴⁹ See AL-RAHIM, *Avicenna's Immediate Disciples: Their Lives and Works* cit., pp. 4-8.

⁵⁰ On the technical terms employed in this passage, see D. GUTAS, *Avicenna and the Aristotelian Tradition*, 2nd ed., Brill, Leiden 2014, p. 31, n. g.

editorial intervention after it was licenced and given to the commissioner of the work. Things changed from the moment al-Ġūzġānī met Avicenna, since, as it can be inferred from T3, he undertook the task of drawing a clean copy from the author's draft, in order to make sure that at least a copy of the work was kept. Within such a scenario, there is no more certainty that all the manuscripts of the works produced after al-Ġūzġānī's encounter with Avicenna (the *Šifā'* included) ultimately derive from a unique archetype, for *a priori* there exists the possibility that copies were drawn either from a clean copy or directly from the author's draft.

If the examples taken from Avicenna's *Madḥal* discussed so far can possibly attest that a first short version of the work underwent several textual additions, one could wonder how this could relate to what al-Ġūzġānī claims in T3. If the short version reflects the text at an earlier stage of composition, then the few manuscripts that bear traces of this version might preserve a text closer to that supposedly preserved in the author's draft. On the other hand, one could wonder if the long version, which had by far a larger diffusion than the short one, owes this fortune to the fact that it was conceived as a sort of 'official version', an improved edition of the work from which all the copies were preferably drawn. As a purely hypothetical suggestion, I wonder if it could have coincided with a clean copy made under al-Ġūzġānī's impulse that incorporated several textual additions and derived (either directly or by the mediation of other copies) from the author's draft.

There is some further evidence in the manuscript tradition of other parts of Avicenna's *Šifā'* which might point at the possibility that the concurrent circulation of a short and a long versions mirrors the coexistence, within Avicenna's school, of the author's draft and of a clean copy attesting the long version of the text. In the section preserving Avicenna's reworking on Aristotle's *Topics* (K. *al-Ġadal*), for instance, some of the manuscripts that preserved a short version of the passages displayed so far preserve once again a short version of a passage of chap. I.6 (T4), concerning the distinction of the predicables genus and differentia. More in detail, the 'short version' of the text is preserved in the already mentioned mss. JTM⁵¹ and, to my knowledge, in other 9 manuscripts only against the rest of the tradition⁵².

⁵¹ Among the witnesses of the short version of K. *al-Madḥal*, mss. ACE do not preserve the K. *al-Ġadal*, for they only preserve the first half of the Logic of the *Šifā'*.

⁵² The nine witnesses of the short version that resulted from this provisional survey of the manuscript tradition are: mss. İstanbul, Süleymaniye Kütüphanesi, Ragıp Paşa 910; İstanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 824; İstanbul, Süleymaniye Kütüphanesi, Şehid Ali Paşa 1748; İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3262; İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3445; İstanbul, Süleymaniye Kütüphanesi, Lâleli 2550; İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi, Hatice Sultan 208; Benares, Ġâmi'a Ġawādiyya 95; Tehran, Kitābhānah-i Millī Ġumhūrī-yi İslamī-yi İran 1801.

T4. IBN SİNÄ, *K. al-Ğadal* I.6, p. 55.11-14 Cairo ed.

The long version of the passage

وأنت تعلم أن الفصل لم يكن في حدودهم
 يخالف الجنس من جهة المقول على أنواع
 مختلفة، بل أنه من جهة أنه كان من طريق ما
 هو، فإذا كان من شأن الفصل، وأنه كما صرح
 به في التعليم الأول حين علم البرهان صالح أن
 يكون في جواب ما هو، فقد شارك الجنس في
 هذا الحد.

The short version of the passage

وأنت تعلم أن الفصل لم يكن في حدودهم
 يخالف الجنس من جهة المقول على أنواع
 مختلفة وأنه كما صرح به في التعليم الأول حين
 علم البرهان صالح أن يكون في جواب ما هو،
 فقد شارك الجنس في هذا الحد.

You know that the differentia, according to their definitions^a, did not differ from the genus in virtue of [its] being predicated of different species, but [rather] in virtue of [the genus] being [predicated] in the ‘what is it?’; thus, if it were in differentia’s nature — as it was explained in the First Teaching, when [Aristotle] taught about the *Demonstration* — to be apt^b to be [given] in answer to ‘what is it?’, then [the differentia] would share with the genus this definition.

You know that the differentia, according to their definitions, did not differ from the genus in virtue of [its] being predicated of different species, and that — as it was explained in the First Teaching, when [Aristotle] taught about of the *Demonstration* — differentia is apt to be [given] in answer to ‘what is it?’, so that [the differentia] might share with the genus this definition.

^a Avicenna refers to the traditional definitions of differentia, namely that provided by Porphyry and the rest of the philosophical tradition following in his path.

^b In order to translate the passage as it is presented in the Cairo edition, a small correction was made: instead of *wa-annahu* in p. 55.13, one has to read *annahu*. Cf. *infra* for a discussion of the problem.

Once again, the divergence between the long and the short version cannot be explained in a satisfying manner as the result of a merely accidental omission of a clause in the short version (hypothesis I.1). Moreover, the passage in its long version, as it is preserved in the Cairo edition and in most of the manuscript tradition, is a bit problematic from a syntactical point of view. The problem lies in the point of conjunction between the clause absent in the short version and the rest of the passage: in fact, the presence of the preceding hypothetical clause prevents from understanding the *wa-annahu* («and that it [*scil.* the differentia]») in the long version in the same way as in the short version, namely

as depending on the opening clause *wa-anta ta'lamu anna al-faṣla* («you know that the differentia...»). A way to understand the passage in its long version would be that of emending the *wa-annahu* in *annahu*, which should be understood in relation to the hypothetical clause («if it were in differentia's nature [...] that it [...]»). A small amount of manuscripts preserving the long version reacts to the syntactical issue by emending in three different ways: some adopt the aforementioned correction of *wa-annahu* in *annahu*⁵³; some others omit *annahu*⁵⁴ and others entirely omit *wa-annahu*⁵⁵. The diffraction of the solutions adopted and the fact that the corrections are in a very small number of witnesses is somehow revealing of the fact that these corrections are *a posteriori* attempts to make sense of a corrupted text.

The fact that the long version of the passage, as it is preserved in most of the manuscript tradition, presents a syntactical issue that the short version avoids, could either mean that the short version is the result of an intentional abridgement, made to avoid the syntactical problem (hypothesis I.2), or the long version is the result of an interpolation, and the syntactical issues would be a sign of the absence in a previous version of the text of the clause only preserved in the long version (hypothesis II).

In this case, however, the manuscript tradition offers an additional element that leads to incline towards hypothesis II rather than to hypothesis I.2. More in detail, six manuscripts include the clause at stake between two marks, and preserve a marginal scribal note, attested in the manuscript tradition in two slightly different versions (A and B), which claims that the passage at stake was absent from the manuscript of the author.

More in detail, a first version of the note (a) is witnessed by three stemmatically-related witnesses⁵⁶, namely ms. İstanbul, Nuruosmaniye Kütüphanesi 2710⁵⁷, ms. Cairo, Maktabat al-Azhar al-Šarīf, Beḥīt Collection

⁵³ Ms. K before a later intervention in a different ink restoring the reading *wa-annahu* by collation.

⁵⁴ Mss. G, Y and ms. Tehran, Kitābhānah-i Madrasah-i 'Ālī-i Sipahsālār 8331 (n. 36 in Appendix A).

⁵⁵ Ms. İstanbul, Köprülü Halk Kütüphanesi, Fazil Ahmet Paşa 894 (n. 56 in Appendix A); the text in this form is, however, nonetheless problematic.

⁵⁶ The three manuscripts are very likely copies descending from the same antigraph, which arguably circulated within the school of Našīr al-Dīn al-Ṭūsī; see S. DI VINCENZO, *Early Exegetical Practice on Avicenna's Šifā' : Faḥr al-Dīn al-Rāzī's Marginalia to Logic*, «Arabic Sciences and Philosophy» (forthcoming).

⁵⁷ A complete copy of the *Šifā'*, dated 25 Rabī' al-Awwal-25 Šawwāl 666H/21st December 1267-15th July 1268 and realized by 'Abd al-Kāfi Ibn 'Abd al-Mağīd Ibn 'Abd Allāh al-Tabrizī.

44988, 331 *falsafa*⁵⁸ and ms. İstanbul, Süleymaniye Kütüphanesi, Ragıp Paşa 909⁵⁹; the second version of the same note (b) is attested by the thirteenth-century ms. İstanbul, Süleymaniye Kütüphanesi, Carullah 1424⁶⁰ (stemmatically related to the manuscripts preserving the version A of the note)⁶¹, and by two seventeenth-century manuscripts, namely ms. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān, Miškāt 243⁶² and ms. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān 6596⁶³ (in the latter, the note is erroneously interpolated in the main text).

T5. Marginal scribal note preserved in the long version

(a) Ms. Nuruosmaniye 2710, f. 101^v; ms. Maktabat al-Azhar, Beḥīt 331, f. 161^v; ms. Ragıp Paşa 909, f. 302^v

(b) Ms. Carullah 1424, f. 137^v; Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān, Miškāt 243, f. 179^r; Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān 6596, f. 172^v

ما بين العلامتين ليس في نسخة المصنّف .

ما بين العلامتين ليس في نسخة الدستور .

What is between the two marks [i.e. the clause at stake] is not in **the manuscript of the author**.

What is between the two marks [i.e. the clause at stake] is not in **the manuscript of the [author's] holograph**.

According to the scribal note preserved in these manuscripts, the clause that is absent in the short version was also absent in the manuscript of the author (*muṣannif*)⁶⁴, or in his own holograph (*dustūr*)⁶⁵. This latter term is the same one

⁵⁸ A thirteenth-century manuscript of which neither the precise date of copy nor the copyist are known; it is one of the ten manuscripts employed in the Cairo edition.

⁵⁹ An Ottoman copy preserving the section of Logic of the *Šifā'* only. The copy dates to the 29 Ġumādā al-āḥira 1134H/ 16th April 1722, and its copyist, Muḥammad Ibn Aḥmad al-Uskūbī, realized it under the request of his master As'ad Ibn 'Alī Ibn 'Uṭmān al-Yānyawī in the *madrasa* of Abū Ayyūb al-Anṣārī in Constantinople.

⁶⁰ A complete copy of the *Šifā'*, dated to the year 693H/1293-4; its copyist, Abū Bakr 'Abd Allāh Ibn Aḥmad Ibn 'Abd Allāh al-Tabrizī, realized it for the library of Quṭb al-Dīn al-Širāzī.

⁶¹ On the relation of this manuscript to the three witnesses of version A, see again DI VINCENZO, *Early Exegetical Practice on Avicenna's Šifā'*: *Faḥr al-Dīn al-Rāzī's Marginalia to Logic* (forthcoming).

⁶² The manuscript is a complete copy of the *Šifā'*; it was copied in Širāz in 1075H/1664-5 by Muḥammad Šāliḥ al-Urdistānī according to ANAWATI, *Essai de bibliographie avicennienne* cit., p. 432. It is reported as undated by R. WISNOVSKY, *Indirect Evidence for Establishing the Text of the Šifā'*, «Oriens», 40, 2012, p. 263.

⁶³ The manuscript is a complete copy of the *Šifā'* realized in 1076H/1665-6 by Sulṭān Muḥammad Ibn Rafī' al-Dīn Muḥammad Iṣfahānī.

⁶⁴ On the Arabic term *muṣannif*, meaning 'author, compositor, compiler', see A. GACEK, *The Arabic Manuscript Tradition: A Glossary of Technical Terms and Bibliography*, Brill, Leiden - Boston - Köln 2001, p. 86.

⁶⁵ The term *dustūr* usually designates the author's original, or the archetype of the entire tradition; see GACEK, *The Arabic Manuscript Tradition* cit., p. 46.

employed by al-Ġūzġānī as a synonym of *sawād* (designating the author's draft) to refer to Avicenna's own holographs in his prologue to the *Šifā'* (see T3 above). If we trust the scribal note, the clause only preserved in the long version should be considered as an addition made after the first composition of the passage.

From a syntactical point of view, as previously argued, the text seems to work better without the allegedly-added clause. From a doctrinal point of view, the clause at stake is unnecessary: Avicenna's argument against the traditional (i.e. Porphyry's and his followers⁶⁶) definitions of the *differentia specifica* claims that, provided that the traditional definitions considered the *differentia* as predicated of several species as well as the genus⁶⁷, and provided that Aristotle allows, to some extent, in the *Posterior Analytics* an essential predication of the *differentia* (a predication ἐν τῷ τί ἐστιν) as well as the genus, then the genus and the *differentia* end up sharing the same definition (i.e. they are both defined as *predicated of several items differing in species in answer to 'what is it?'*), which is an undesired conclusion. The structure of Avicenna's critical argument is seemingly perfectly fine without the additional clause.

What is, then, the purpose of the addition of that clause in the long version? First, it specifies the element in virtue of which the *differentia* and the genus are distinguished in the traditional definitions, namely by the fact that genus is predicated in the 'what is it?' (ar. *min ʔariqi mā huwa*). Second, it introduces a hypothetical clause that changes quite radically the structure of the phrase: in fact, instead of directly stating, as in the short version, that Aristotle allows a predication of the *differentia* in answer to 'what is it?' (ar. *fi ʔawābi mā huwa*), the long version suggests it in a more hypothetical way («if it were in *differentia*'s nature [...] to be apt to be [given] in answer to 'what is it?'...»). My suggestion is that the clause might have been added not only with an explicative purpose, but likely with the aim of 'rectifying' the doctrine of the passage too. In fact, the modification could be understood in the light of Avicenna's distinction between a predication in the 'what is it?' (ar. *min ʔariqi mā huwa*) — describing the way in which the constituents of a quiddity (hence, both genus and *differentia*) are essentially predicated — and a predication in answer to 'what is it?' (ar. *fi ʔawābi mā huwa*) — more specifically describing the way in which predicables signifying the thing's quiddity, like the genus and the species, are essentially predicated of it, to the exclusion of the *differentia*⁶⁸. Reading in the short version of T4 that the *differentia* is

⁶⁶ For a tentative identification of the indistinct plurality of thinkers to which Avicenna refers in this passage, see S. DI VINCENZO, *Avicenna against Porphyry's Definition of Differentia Specifica* «Documenti e studi sulla tradizione filosofica medievale», 26, 2015, pp. 129-183.

⁶⁷ For Avicenna's refutation of this point, see DI VINCENZO, *Avicenna against Porphyry's Definition of Differentia Specifica* cit., pp. 132-151.

⁶⁸ This distinction is extensively dealt with by Avicenna in *Madḥal*, II.1, p. 94.4-96.18 Cairo ed.; for an English translation and a discussion of this passage, cf. DI VINCENZO, *Avicenna against Porphyry's Definition of Differentia Specifica* cit., pp. 152-183. For this distinction in Avicenna's *Burhān*, see B. IBRAHIM, *Freeing Philosophy from Metaphysics: Fakhr al-Dīn al-Rāzī's Philosophical Approach to the Study of Natural Phenomena*, PhD Thesis submitted to McGill University, Institute of Islamic Studies, McGill University, Montreal 2013, especially pp. 47-59.

predicated in answer to ‘what is it?’ (ar. *fī ḡawābi mā huwa*) might have, then, impelled someone to modify the passage, in order to smooth a statement that was in apparent contradiction with Avicenna’s own thought. However, the contradiction in the short version is only apparent: Avicenna is just reporting the claim that the differentia is predicated in answer to ‘what is it?’ (*fī ḡawābi mā huwa*) ascribing it to Aristotle, and is still not exposing his own distinction of two levels of essential predication. In sum, the addition of the clause could be the result of a revision of the text aiming at making it clearer and more ‘consistent’ with Avicenna’s doctrine.

To sum up, the textual case in *Ġadal*, I.6 presents several elements of analogy with the cases taken from *Madḥal*: most part of the manuscript tradition attests, in this case as well, a longer version of the text, and the longer version presents some syntactical difficulties, whereas the shorter version is perfectly fine. In this case, however, we get some additional information allowing us to exclude the hypothesis that the shorter version is the result of an intentional abridgement of the text (I.2), for we are told that it is rather the version preserved in the author’s manuscript and, therefore, supposedly the original version. In this case as well, the hypothesis that the long version might be the result of a copyist’s interpolation (hypothesis II.b.2) seems quite unlikely, because of the nature of the text interpolated.

IV.3. Who’s the ‘author’ of the long version (versio vulgata)?

Ideally, the textual additions showed so far for Avicenna’s *Madḥal* and *Ġadal*, implying a doctrinal expansion and modification of the text, should be expected from the author’s part. However, although it cannot be definitely excluded, both the style and content of some of the passages analysed (cf. cases 3-5 in section III) represent a difficulty face to the hypothesis that the additions are all Avicenna’s (hypothesis II.1). The traditional notion of ‘author’ — strictly referring to one single authorial figure that is the only one who detains the control of all of his work — is probably not entirely suitable to account for the composition of the *Šifā’*. Perhaps, the possibility that the work underwent a revision that is, to some extent, the result of a collective work should be taken into account. A scenario of this sort seems to be suggested by a series of testimonies concerning the composition of the work. In fact, the text of the *Kitāb al-Šifā’* was an object of the scholastic debate when Avicenna was still alive; this can be inferred from the introduction of a letter of Avicenna’s to his colleague Ibn Zayla (d. 440H/1048)⁶⁹, in which Ibn Zayla declares having urged Avicenna to provide further clarifications concerning what he states in the beginning of the *Kitāb al-Šifā’* (T6).

⁶⁹ On Ibn Zayla, see REISMAN, *The Making of the Avicennan Tradition* cit., pp. 195-199 and AL-RAHIM, *Avicenna’s Immediate Disciples: their Lives and Works* cit., pp. 14-16. For more information about the text of this introduction and for his English translation, see REISMAN, *The Making of the Avicennan Tradition* cit., pp. 199-200.

T6. Introduction to Ibn Sīnā's letter to Ibn Zayla [ed. REISMAN, *The making of the Avicennan tradition*, p. 284]⁷⁰

« [Ibn Zayla] said: In our Master's statement at the beginning of *The Cure* (*fi ftitāh Kitāb al-Šifā'*), I came upon some contradictory and conflicting points that fall outside the consensus [of scholars] (*al-iǧmā'*). So it would behove him to provide a correction of that and to disclose the picture of it [that he has in mind], if he can ».

Discussions concerning several doctrinal points of the *Šifā'* might have arisen from the reading-sessions of the work to which, according to al-Ġūzġānī's account, Avicenna took part together with his disciples, apparently also before the end of the composition of the whole work (T7):

T7. ABŪ 'UBAYD AL-ĠŪZĠĀNĪ, *Biography of Ibn Sīnā*, pp. 54-56 ed. Gohlman⁷¹

« [...] And so he began with the 'Physics' (*al-Ṭabī'īyyāt*) of a work which he called the *Šifā'* (*Healing*). He had already written the first book of the *Qānūn*, and every night pupils (*ṭalabat al-ilm*) would gather at his house, while by turns I would read from the *Šifā'* and someone else would read from the *Qānūn*. [...] The instruction took place at night, because of the lack of free time during the day on account of his service to the Amīr »⁷².

An objection could possibly be raised against the hypothesis of a second recension resulting from the scholarly activity of Avicenna's disciples on their master's work, namely that we have little clue about their attitude towards Avicenna's authority and, consequently, it cannot be stated to what extent they could feel entitled to introduce modifications in his own work. As a partial answer to such an objection, however, it could be observed that some of Avicenna's works were the object of non-authorial editorial interventions within Avicenna's school. For instance, al-Ġūzġānī's editorial activity on Avicenna's works, and more specifically on the *Kitāb al-Šifā'*, is well documented⁷³. Just to mention a couple of instances of the interventions specifically concerning the

⁷⁰ Transl. in REISMAN, *The Making of the Avicennan Tradition* cit., p. 199, slightly modified.

⁷¹ Transl. in W. E. GOHLMAN, *The Life of Ibn Sina: A Critical Edition and Annotated Translation*, SUNY Press, Albany, New York 1974, pp. 55-57.

⁷² The amīr Abū Ṭāhir Šams al-Dawla (r. 387-419/997-1021 ca.).

⁷³ As reported by al-Bayhaqī (*Tatimmat šiwān al-hikma*, p. 94 ed. Šafi'), al-Ġūzġānī is responsible for the addition of a section on Mathematics to both the *Kitāb al-Naǧāt* and the *Dānešnāme-ye 'Alā'*; see also A. BERTOLACCI, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā' – A Milestone of Western Metaphysical Thought*, Brill, Leiden - Boston 2006, pp. 37, 587-588 and AL-RAHIM, *Avicenna's Immediate Disciples: Their Lives and Works* cit., p. 7.

Šifā', one can think of the addition of his own prologue to the whole *summa* and to the quotation of an excerpt of Avicenna's *Al-Adwiya al-Qalbiyya* added between the fourth and the fifth treatise of the *Kitāb al-Nafs*⁷⁴. It is also worth recalling that T3 attested that al-Ğüzğānī assumed at a certain point a crucial role within the transmission of Avicenna's work, like the creation of a clean copy that was probably meant to be the archetype of the rest of the tradition⁷⁵. Seemingly, the editing of a clean copy of Avicenna's works after their first composition was more a task undertook by Avicenna's circle of disciples rather than Avicenna's own occupation⁷⁶. It is, therefore, possible that Avicenna's direct disciples played, at least to some extent, a non-marginal role in the revision and improvement of their master's work, contributing to creating a second, enlarged and 'improved' version of the text.

CONCLUSION

The present survey conducted on the manuscript tradition of Avicenna's *Kitāb al-Madḥal* revealed several textual cases that might point to the existence of two different recensions of the work. Some additional evidence, provided by the analysis of the manuscript tradition of another section of the *Kitāb al-Šifā'*, namely the *Kitāb al-Ğadal*, together with the information about the composition of the *Šifā'* that we get from the testimonies of Avicenna's direct disciples, might suggest that a first authorial recension of the work might have been revised and enlarged by means of textual additions. The long version resulting from this revision would be a second recension of the work, a '*versio vulgata*' that is much more widespread in the manuscript tradition and in whose genesis the scholarly activity of Avicenna's disciples might perhaps have played a relevant role. In such a scenario, the twelfth-century Latin translation of *Kitāb al-Madḥal* would

⁷⁴ On this addition and its diffusion within the manuscript tradition, see the article by T. Alpina in the present volume.

⁷⁵ Al-Ğüzğānī also personally undertook, in certain cases, the copy of his master's works; for instance, he wrote under dictation the *Muḥtaṣar al-Awṣaṭ fi l-Mantiq*; cf. ABŪ 'UBAYD AL-ĞÜZĞĀNĪ, *Biography of Ibn Sīnā*, p. 44 ed. Gohlman: « I used to attend him [Ibn Sīnā] every day and study the *Almagest* and ask for dictation in logic, so he dictated *The Middle Summary on Logic (al-Muḥtaṣar al-Awṣaṭ fi l-Mantiq)* to me » (transl. in GOHLMAN, *The Life of Ibn Sina* cit., p. 45).

⁷⁶ In the case of Avicenna's *Lisān al-'Arab*, apparently, Avicenna's circle failed in this task, due to the poor conditions of Avicenna's first draft; the author evidently didn't take care of drawing a clean copy of the work, according to his habits (cf. T3). See ABŪ 'UBAYD AL-ĞÜZĞĀNĪ, *Biography of Ibn Sīnā*, p. 72 ed. Gohlman: « The Master then wrote a book on philology which he called *The Arabic Language (Lisān al-'Arab)*, to which he had composed nothing analogous on philology, and which he did not transcribe it into clean copy (*al-bayāḍ*). The writing was still in its rough state ('*alā musawwadatīhi*) when he died, and no one could discover how to put it in order (*tartīb*) » (transl. in GOHLMAN, *The Life of Ibn Sina* cit., p. 73, slightly modified).

play a key role in the reconstruction of an earlier stage of composition of the work, being based on an Arabic exemplar that would be the so far known most ancient witness of the first recension of Avicenna's work.

The hypothetical reconstruction provided in this paper, as a merely provisional result of a still ongoing research, demands a further inquiry into the other half of the estimated manuscript tradition of Avicenna's *Kitāb al-Madḥal* and an exhaustive survey of the manuscript tradition of the other sections of the *summa*. Such an inquiry is expected to be able to verify if, on the one hand, this hypothesis of explanation holds for the section of *Madḥal* and, on the other, if it can be extended to the other sections of the *Šifā'*. By way of conclusion, I'd suggest that the hypothesis concerning the existence of two recensions of Avicenna's first work of the *Šifā'* — and, possibly, of the whole *summa* — is at least a possibility that should not be overlooked when undertaking the task of editing the text of the different sections of Avicenna's *Šifā'*.

APPENDIX A

LIST OF THE MANUSCRIPTS EMPLOYED FOR THE PRESENT WORK AND OF THE MANUSCRIPTS EMPLOYED FOR THE CAIRO EDITION⁷⁷

Manuscripts employed	Mss. of Cairo ed.
XIIc.	
Tehran, Kitābhānah-i Millī Malik 4276 (first decade of Dū l-Ḥiġġa 536H/4 th -13 th July 1142)	
XIIIc.	
* İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi 772 (Şa‘bān 628H / June-July 1231)	x
İstanbul, Nuruosmaniye Kütüphanesi 2710 (25 Rabī‘ al-Awwal-25 Şawwāl 666H/21 st December 1267-15 th July 1268)	
Cairo, Maktabat al-Azhar al-Şarīf, Beḥīt Collection 44988, 331 <i>falsafa</i> (VII/XIII c.)	x
İstanbul, Süleymaniye Kütüphanesi, Ayasofya 2442 (671-674H/1272-1276)	
* İstanbul, Millet Kütüphanesi (now: Millet Yazma Eser Kütüphanesi), Ali Emiri 1504 (674H/1275-6)	x
* İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3261 (10 Rabī‘ l-awwal 677H/8 th August 1278)	
* İstanbul, Süleymaniye Kütüphanesi, Âşir Efendi 207 (680H/1281-2)	x
İstanbul, Süleymaniye Kütüphanesi, Carullah 1424 (693H/1293-4)	
İstanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 823 (697H/1297-8)	
XIVc.	
İstanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 822 (XIII-XIV c.)	
XVc.	
İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3262 (IX/XV c.)	

⁷⁷ An asterisk marks the manuscripts bearing traces of the short version of Avicenna’s text.

*Tehran, Kitābhānah-i Millī Malik 1057 (IX/ XV c.)	
İstanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3445 (XI/ XVII c. Anawati; probably before XV/ XVI c.)	
İstanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 824 (824H/ 1421-2)	x
Tehran, Kitābhānah-i Mağlis-i Şūrā-yi Millī (now: Mağlis-i Şūrā-yi Islāmī Library) 135 (871H/ 1466-7)	
İstanbul, Süleymaniye Kütüphanesi, Şehid Ali Paşa 1748 (27 Rağab 879H/16 th December 1474)	
İstanbul, Süleymaniye Kütüphanesi, Yeni Cāmi 771 (885H/ 1480-1)	
* İstanbul, Süleymaniye Kütüphanesi, Yeni Cāmi 770 (888H/ 1483-4)	
İstanbul, Nuruosmaniye Kütüphanesi 2709 (886H/1481-897H/ 1492)	
Benares, Ġāmi'a Ġawādiyya, Bonaras 95 (20 Rabī' al-Awwal 902H/5 th December 1496)	
XVIc.	
* Leiden, Universiteitsbibliotheek, Golius Or. 4 (before Xc. H/ XVIc.)	
* Tehran, Kitābhānah-i Millī Ġumhūri-yi Islami-yi Iran 1326 [former 580] (Xc. H ?/ XVI c.)	
İstanbul, Nuruosmaniye Kütüphanesi 2708 (X/ XVI c.)	x
Khvoy, Kitābhānah-i Madrasa-i Namāzī 247 (Ramaḍān 986H/November-December 1578)	
Dublin, Chester Beatty Library, Arabic 3983 (vols. i-ii) (1002H/ 1593-4)	
XVIIc.	
Cairo, Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā'iq al-Qawmiyya), 894 <i>falsafa</i> (X-XI/ XVI-XVII c.)	x
* Mašhad, Kitābhānah-i Āstān-i Quds-i Razavī 1119 (XI/ XVII c.)	
London, British Museum (now: BLOIOC) Or. 7500 (XI/ XVII c.)	x
Kashan, Fahrang va Irshad 15 (XI/ XVII c.)	
Tehran, Kitābhānah-i Mağlis-i Şūrā-yi Millī 1907 (XI/ XVII c.)	
Tehran, Kitābhānah-i Dāniškāda-i İlāhiyyāt-i Dānişgāh-i Tihṛān 236/1 (XI/ XVII c.)	

İstanbul, Süleymaniye Kütüphanesi, Lâleli 2550 (1023H/ 1614-5)	
* İstanbul, Süleymaniye Kütüphanesi, Yeni Câmi 773 (26 Şa‘bân 1041H/18 th March 1632)	
Paris, Bibliothèque Nationale, Ar. 6829 (Dū l-ḥiğğā 1054-Dū l-Qa‘da 1055H /January-February 1645 – December 1645 -January 1646)	
Tehran, Kitābhānah-i Madrasah-i ‘Ālī-i Sipahsālār (now: Kitābhānah-i Madrasah-i ‘Ālī-i Šahīd Muṭahharī) 8331 (1055H/ 1645-6)	
İstanbul, Süleymaniye Kütüphanesi, Hamidiye 795 (1066H/ 1655-6)	
Aligarh, Maulana Azad Library, Aligarh Muslim University 110/30 (1071H/ 1660-1)	
Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān, Miškāt 243 (Širāz, 1075H/ 1664-5)	
Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān 6596 (1076H/ 1665-6)	
London, Royal Asiatic Society, Arabic 58 (Rabī‘ al-Awwal 1082H/ July-August 1671)	
İstanbul, Millet Kütüphanesi (now: Millet Yazma Eser Kütüphanesi), Feyzullah Efendi 1206 (1093H/ 1682)	
İstanbul, Süleymaniye Kütüphanesi, Hekimoğlu Ali Paşa 857 (1102H/ 1690-1)	
XVIIIc.	
İstanbul, Süleymaniye Kütüphanesi, Carullah 1425 (1125H/ 1713-4)	
İstanbul, Süleymaniye Kütüphanesi, Atıf Efendi 1565 (before 29 Şafar 1135H / 9 th December 1722)	
İstanbul, Süleymaniye Kütüphanesi, Ragıp Paşa 909 (İstanbul, 29 Ğumādā al-āḥira 1134H/ 16 th April 1722)	
London, British Museum (now: BLOIOC), India Office Ar. 1420 (1148H/ 1735-6 , from an exemplar completed in 891H/1486-7)	x
Rampur, Rampur Raza Library, 3477 (XII/ XVIII c.)	
XIXc.	
Beirut, Maktaba Šarqiyya, Université Saint-Joseph 372 (XIII/ XIX c.)	
Hyderabad, Osmaniya University Library, acq. 582 (XIII/ XIX c.)	

Tehran, Kitābhānah-i Mağlis-i Šūrā-yi Millī 1908 (XIII/**XIX** c.)

Rampur, Rampur Raza Library, 3478 (1267H/**1850-1**)

XXc.

Cairo, Dār
al-Kutub al-
Mişriyya 262
ḥikma wa-falsafa
(1337H/**1918-9**)

Tehran, Kitābhānah-i Millī 1801 (final colophon, different hand:
date 1343H = **1924-5**)

Tehran, Kitābhānah-i Dāniškāda-i Ilāhiyyāt-i Dānişgāh-i Tihrān
593/1 (XIV/**XX** c.)

Unknown date

İstanbul, Beyazıt Kütüphanesi (form.: ‘Umūmī) 4288

İstanbul, Köprülü Halk Kütüphanesi, Fazıl Ahmet Paşa 894

İstanbul, Süleymaniye Kütüphanesi, Ragıp Paşa 910

* İstanbul, Süleymaniye Kütüphanesi, Yeni Cāmi, Hatice Sultan 208

Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran 7590

APPENDIX B

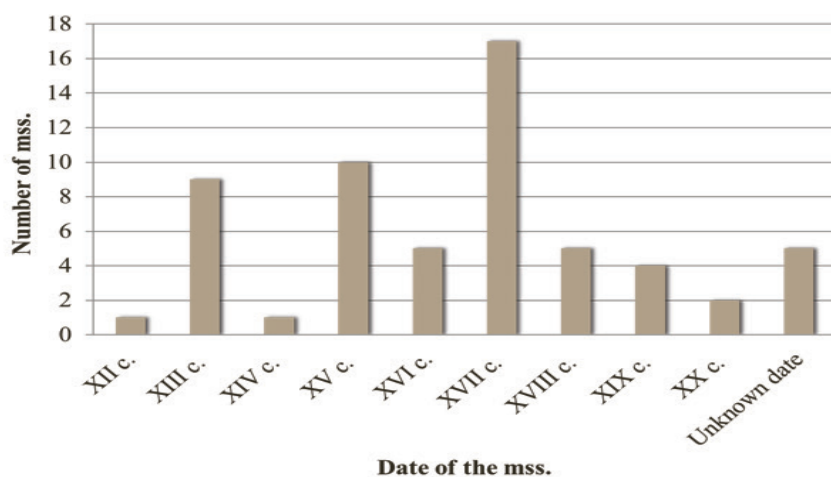
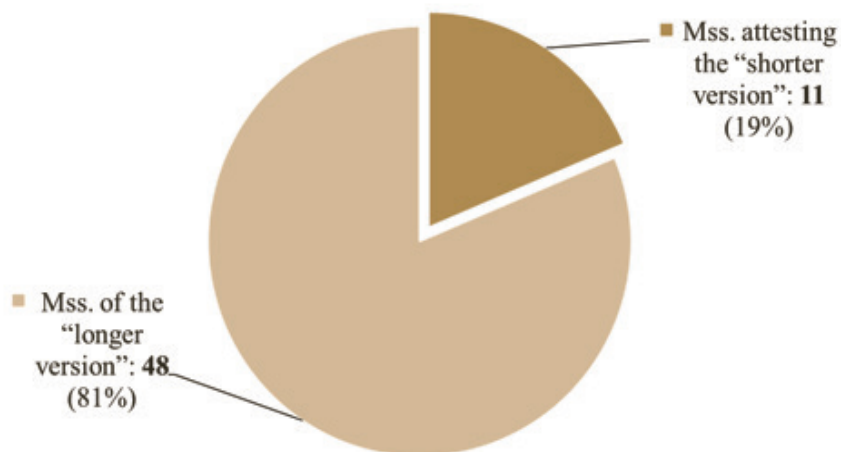
ANALYSIS OF THE MANUSCRIPT TRADITION OF AVICENNA'S *KITĀB AL-MADḤAL***Fig. 1.** *Percentage of the manuscript tradition taken into account for the present inquiry***Fig. 2.** *Chronological distribution of the manuscripts taken into account*

Fig. 3. *Manuscripts taken into exam preserving the short version*



ABSTRACT

Is There a versio vulgata of Avicenna's Kitāb al-Šifā' ? On the Hypothesis of a Double Recension of Kitāb al-Madḥal

The present paper concerns the textual tradition of Avicenna's reworking of Porphyry's *Isagoge* (*Kitāb al-Madḥal*) opening the Logic section of Avicenna's *Book of the Cure* (*Kitāb al-Šifā'*). The present inquiry, conducted on 59 Arabic manuscripts and on the twelfth-century Latin translation of the work, has as its starting point the observation that the Latin translation, together with 11 Arabic manuscripts and the early indirect tradition of the work, witnesses the existence of a different, shorter, version of some passages of the text than that attested by most of the manuscripts. I shall suggest that one of the possibilities that should at least be considered in the attempt to explain this phenomenon is that of considering the short version of the text as an earlier recension of the text. In the frame of this hypothetical suggestion, the majority of the manuscript tradition would preserve an interpolated text, a *versio vulgata* that might not correspond to Avicenna's first version of the text. The existence and diffusion of two different recensions of the work might provide a clue of the compositional and editorial process that Avicenna's *Book of the Cure* underwent.

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NICCOLÒ CAMINADA

A Latin Translation? The Reception of Avicenna in Albert the Great's *De praedicamentis**

STATUS QUAESTIONIS

The aim of the present paper is to discuss the influence of Avicenna on Albert the Great's commentary on Aristotle's *Categories*. I shall not inspect in detail the whole of Avicenna's reception in this work, which is by itself significative and involves many relevant issues; I will focus, instead, on a particular aspect of this reception, namely the role supposedly played by Avicenna's *Categories* (the *Maqūlāt* of the *Kitāb al-Šifā'*) in the shaping of Albert's doctrine and exegesis. As a matter of fact, though a Latin translation of Avicenna's *Maqūlāt* is neither extant nor attested¹, there has been a scholarly debate on the possibility of its being a source

* *Acknowledgements and preliminary remarks.* I presented a first draft of this article in Paris, at the *Colloque international de doctorants en philosophie arabe* (7-8 october 2016); I thank all the participants for their useful observations. I am also grateful to Amos Bertolacci and the two anonymous referees for their attentive reading of this paper, and their precious remarks; to Silvia Di Vincenzo, for the codicological advice. In the quotations of Albert's works, where not explicitly noted, I normally refer to the available volumes of the *Editio Coloniensis* (1951 - in progress); when citing still unedited texts and commentaries I use, instead, A. Borgnet's edition (1890-99). The references to Avicenna's Arabic text follow the page numbering of the Cairo edition of the *Kitāb al-Šifā'*. For the text of Aristotle's *Categories*, I always quote J. L. Ackrill's English translation (*Aristotle's Categories and De Interpretatione*, Clarendon Press, Oxford 1963). All translations from Arabic are mine.

¹ As far as we know, the logical section of Avicenna's *Kitāb al-Šifā'* has only been partially translated into Latin. The only work which is fully extant in Latin is the first part, the *Madḥal*, a paraphrase of Porphyry's *Isagoge*: translated in Toledo in the third quarter of the XII century, it was known to the Latins simply as *Logica*. Besides this, there are only fragmentary traces of further translations: Dominicus Gundissalinus' *De divisione philosophiae* contains a Latin version of chapter II.7 of Avicenna's *Burhān* (the section corresponding to Aristotle's *Posterior Analytics*), very likely datable to the same period as the *Logica*; whereas to a second phase of translations belong the fragments of Avicenna's *Ḥiṭāba* found in Hermannus Alemannus' Latin translation of Aristotle's *Rhetoric*. For two recent overviews of Avicenna's Latin versions see A. BERTOLACCI, *A community of translators: the Latin medieval versions of Avicenna's Book of the Cure*, in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe 1100-1500*, Brepols, Turnhout 2011, pp. 37-54; J. JANSSENS, *Ibn Sīnā (Avicenna). The Latin translations of*, in H. LAGERLUND ed., *Encyclopedia of Medieval Philosophy. Between 500 and 1500*, De Gruyter, Berlin 2011, pp. 522-527.

for Albert the Great's *De praedicamentis*. The starting point of this discussion was an article appeared in 1972, by the Italian scholar Mario Grignaschi, entitled *Les traductions latines des ouvrages de la logique arabe et l'abrégé d'Alfarabi*².

In the first part of this contribution Grignaschi presented a state-of-the-art, concerning the Arabic works on logic known to the Latins between the XII and XIII century; among these, he mentioned the fragment of a Latin translation of al-Fārābī's *compendia* on the discipline of logic, discovered some years earlier by Dominique Salman in the manuscript Bruges 424³. He then engaged in a discussion of various issues concerning the composition and transmission of these Farabian *opuscula*, which he treated as a unitary work (a complete synthesis of the Aristotelian logical *corpus*)⁴. In the second part of the article, Grignaschi moved to other, related considerations: given the evidence of a partial Latin translation of Fārābī's *compendia*, he turned to inspect the numerous quotations of Fārābī and Avicenna in Albert the Great's commentaries on logic, so as to establish precisely their source (and to see whether they attested the knowledge of works other than Fārābī's *compendia*). Since the doctrinal material provided by Fārābī's *opuscula* is too synthetic to explain the variety and richness of Albert's quotations, he hypothesized that Albert knew translations both of Fārābī's greater commentaries, and of the logical sections of Avicenna's *Kitāb al-Šifā'* posterior to the *Madḥal*. To support his thesis, Grignaschi provided an examination of some of the quotations of Avicenna and Fārābī in Albert the Great's commentaries on logic; he briefly gave an account of their context, and then identified, as their sources, passages of the aforementioned works. This he also did as regards the *De praedicamentis*: he thought — and also tried to demonstrate — that no less than seven quotations of Avicenna in this work drew directly on the *Maqūlāt* of the *Kitāb al-Šifā'*.

² M. GRIGNASCHI, *Les traductions latines des ouvrages de la logique arabe et l'abrégé d'Alfarabii*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 39, 1972, pp. 41-107.

³ D. H. SALMAN, *Fragments inédits de la logique d'Alfarabi*, « Revue des sciences philosophiques et théologiques », 32, 1948, pp. 222-225. The short fragment, entitled *Nota ex logica Alfarabii quaedam sumpta*, is said by N. Rescher (*Al-Fārābī: an annotated bibliography*, University of Pittsburgh Press, Pittsburgh 1962, pp. 33-34) to correspond — at least in its beginning — to a section of Fārābī's work *Šarā' it̃ al-yaqīn* (*The conditions of certainty*), based on Aristotle's *Posterior Analytics*. Janssens argues, instead, that it corresponds partially to the epitome of the *De interpretatione*, partially to a fragment derived, very likely, from the 'Great Book on Music' (*Kitāb al-mūsīqī al-kabīr*). See J. JANSSENS, *Albert le Grand et sa connaissance des écrits logiques arabes: une réévaluation du dossier Grignaschi*, in J. BRUMBERG-CHAUMONT ed., *L'Organon dans la translatio studiorum à l'époque d'Albert le Grand*, Brepols, Turnhout 2013, pp. 225-257.

⁴ Nowadays they are rather considered as separate works: see U. RUDOLPH, *Abū Naṣr al-Fārābī*, in U. RUDOLPH, R. WÜRSCH eds., *Grundriss der Geschichte der Philosophie: Philosophie in der islamischen Welt* §7.1, Schwabe Verlag, Basel 2012, p. 413; see *ibid.*, pp. 365-366 for a list of critical editions of Fārābī's logical works.

Grignaschi's dossier of quotations was reassessed in 2013 by Jules Janssens, in an essay entitled *Albert le Grand et sa connaissance des écrits logiques arabes : une réévaluation du dossier Grignaschi*. Janssens' core assumption was more economical than Grignaschi's conclusion: it consisted of supposing that the source of these passages might instead be found in Arabic works surely translated into Latin, apparently well-known by Albert, such as the *Madḥal* (Avicenna's *Logica*), the *Metaphysics*, the *Physics* and the *De anima* of the *Kitāb al-Šifā'*. For those few cases where Grignaschi's thesis seems verified, Janssens argued for the likely existence of *florilegia* and fragments of Arabic authors, on which Albert the Great possibly drew⁵.

Against this background, I will here reprise in detail the passages of Albert's *De praedicamentis* discussed by Grignaschi and Janssens, thus narrowing the focus of their — more comprehensive — enquiries; my aim is not to assess conclusively the issue of the Latin translation of Avicenna's *Maqūlāt*, but only to provide further elements of discussion — and to make some more general suggestions regarding Avicenna's import in the *De praedicamentis*. In paragraphs 1-4 I shall discuss the main quotations at stake, following their order of appearance, and the structure of Albert's text; in paragraph 5 I will briefly evaluate one of the Avicennan quotations that Grignaschi did not take into account.

A few words of introduction to Albert's work might be useful. The *De praedicamentis*, composed — according to C. Steel and S. Donati, the authors of the recent critical edition — in 1252⁶, is a part of Albert's exhaustive plan of commentaries on the Aristotelian corpus; unlike many commentaries on the *Categories* written in that period, it does not have the form of a commentary *per quaestiones*, but that of a paraphrase of Aristotle's text (such as other 'Aristotelian' works by Albert)⁷. The continuous exegesis of Aristotle's words is interrupted, at times, by independent sections and digressions, essentially devoted to the discussion of doubts concerning the text (though they may, sometimes, develop original reflexions of Albert on Aristotle's doctrine). As a matter of fact, though Albert's originality in logic has been questioned by scholars, his work on the *Categories* presents indeed many aspects of interest⁸.

⁵ JANSSENS, *Albert le Grand et sa connaissance cit.*, pp. 256-257.

⁶ ALB., *De praed., Prolegomena*, p. V. For a review of the *editio coloniensis* of the *De praedicamentis*, see N. CAMINADA, Review of: *Alberti Magni Opera omnia*, t. I, p. IB: *De praedicamentis*, « *Studi medievali* » terza serie, 58/1, 2017, pp. 416-420.

⁷ For an overview of the main commentaries on the *Categories* written in the 13th century, see R. ANDREWS, *Question Commentaries on the Categories in the thirteenth Century*, « *Medioevo* », 26, 2001, pp. 265-326; a recent focus on the first half of the century is provided by H. HANSEN, *John Pagus on Aristotle's Categories. A Study and Edition of the Rationes super Praedicamenta Aristotelis*, Leuven University Press, Leuven 2012 (*Introductory study*, pp. 40-49).

⁸ For a general evaluation of Albert's contributions to logic see S. EBBESEN, *Albert (the Great?)'s companion to the Organon*, in A. ZIMMERMANN ed., *Albert der Grosse. Seine Zeit, sein Werk, seine Wirkung*, « *Miscellanea Medievalia* », 14, De Gruyter, Berlin - New York 1981, pp. 89-103 (reprint in S. EBBESEN,

On the Latin side, the major sources of the *De praedicamentis* are presumably Boethius and a contemporary of Albert, Robert Kilwardby, the author of a book of *Notulae* on Aristotle's *Categories*, from which Albert took many of the *dubitabilia* discussed in the aporetic sections⁹. As to the Greek sources, Albert was probably unable to consult directly any late ancient commentary on the *Categories*; if we trust the chronology proposed by the editors, Simplicius' commentary was translated into Latin later (by William of Moerbeke, in 1266)¹⁰. As concerns the Arabic sources, the authors quoted by Albert are al-Fārābī, Avicenna, al-Ġazālī, Averroes and 'Mescalach' (the astronomer Mašā'allāh)¹¹; he seems not to have known (or, at least, used) Averroes' middle commentary on the *Categories*, since all the quotations of Averroes in the *De praedicamentis* rather refer to physical or metaphysical discussions¹².

As regards Avicenna, the works to which Albert refers by name in the *De praedicamentis* are the *Physics* (*Samā' ṭabī'i*) of the *Šifā'* (mentioned in Latin as *Sufficientia*), of which Albert probably knew only the first two books and the beginning of the third¹³; the *Liber sextus de naturalibus* (Avicenna's *De anima*, *Kitāb*

Topics in Latin Philosophy from the 12th-14th centuries. Collected essays of Sten Ebbesen, vol. 2, Farnham/Surrey – Burlington 2008, pp. 95-108). For recent, specific contributions on Albert's commentary see B. TREMBLAY, *Albertus Magnus: On the Subject of Aristotle's Categories*, in L. P. NEWTON ed., *Medieval Commentaries on Aristotle's Categories*, Brill, Leiden – Boston 2008, pp. 73-97; ID., *Albertus Magnus on the Problem of the Division of the Categories*, « Documenti e studi sulla tradizione filosofica medievale », 27, 2016, pp. 303-345.

⁹ Kilwardby's *Notulae* are available on-line in A. Conti's provisional transcription (URL: http://www-static.cc.univaq.it/diri/lettere/docenti/conti/Allegati/Kilwardby_praedicamenta.pdf). Kilwardby's influence on Albert was analysed in detail by C. Steel (*Albert's use of Kilwardby's Notulae in his paraphrase of the Categories*, in *Via Alberti. Texte-Quellen-Interpretationen*, Aschendorff, Münster 2009, pp. 481-507).

¹⁰ For the date and the attribution of Simplicius' Latin translation, see *Simplicius. Commentaire sur les Catégories d'Aristote, traduction de Guillaume de Moerbeke*, ed. A. PATTIN, in collaboration with W. STUYVEN, Publications universitaires de Louvain, Louvain – Paris 1971-1975 (vol. I, pp. xi-xxiii).

¹¹ A complete list of Albert's quotations of Mašā'allāh is found in A. CORTABARRIA, *Fuentes árabes de San Alberto Magno: el astrónomo Mashallah*, « Estudios Filosóficos », 34, 1985, pp. 400-415.

¹² The translation of Averroes' middle commentary (*Talḥiṣ*) on Aristotle's *Categories* is attributed to Guillelmus de Luna; it is extant and edited by R. Hissette, with the collaboration of A. Bertolacci (*Averroes latinus, Commentum medium super librum Praedicamentorum Aristotelis. Translatio Wilhelmo de Luna adscripta*, Peeters, Leuven 2010).

¹³ Whereas books I-III.1 were translated in Toledo by an anonymous author, part of the third book (III. 1-10) was translated later in Burgos by Johannes Gunsalvi and a certain Salomon, between 1275 and 1280 (See BERTOLACCI, *A Community of Translators* cit., pp. 39-46). In the *De praedicamentis*, Avicenna's *Sufficientia* is mentioned twice (ALB., *De praed.*, III.1, p. 50.13; III.7, p. 62.54). The first and the second book of this translation are edited (AVICENNA LATINUS, *Liber primus naturalium. Tractatus primus de causis et principii naturalis*, ed. by S. VAN RIET, Peeters – Brill, Louvain-la-Neuve – Leiden 1992; AVICENNA LATINUS, *Liber primus naturalium II. De motu et de consimilibus*, edd. S. VAN RIET, J. JANSSENS, A. ALLARD, Académie Royale de Belgique, Bruxelles 2006).

al-nafs)¹⁴; quite curiously, even his *Categories* (*Praedicamenta*), that are recalled only once — in a passage from the third chapter of the first treatise. From this passage I shall start, now, my discussion.

1. HOMONYMY AND SYNONYMY

De praed., I.3 is a chapter devoted to the discussion of homonyms, and other sorts of commonness or dissimilarity of names and definitions¹⁵. Besides homonyms (*equivoca*), synonyms (*univoca*) and paronyms (*denominativa*), in line with the previous exegetical tradition, Albert mentions here the cases of polyonyms (*multivoca* or *synonyma*), namely things bearing the same definition but different names, and heteronyms (*diversivoca*), namely things having different definitions and different names. Since polyonyms and heteronyms, as is known, are not mentioned or discussed by Aristotle, near the end of the chapter Albert precises the reason for their customary treatment in the exegesis of the *Categories*:

T1: ALBERT, *De praed.*, I.3, p. 10.13-22:

« Attendendum autem est quod, quamvis multivoca sive synonyma et diversivoca non sint de his, quibus praedicabile ordinatur in linea generis — eo quod synonyma respiciunt unum particulare vel speciale per diversas proprietates, quae sunt in illo multis significatae nominibus, diversivoca autem, sicut sunt diversa nomina, sic diversis attribuuntur —, tamen, quia et AVICENNA et ALGAZEL et IOHANNES DAMASCENUS in suis PRAEDICAMENTIS ponunt ista, et nos ea hic ponemus, non ad necessitatem scientiae, sed ad doctrinae perfectionem ».

This reference is taken by Grignaschi as a sign of Albert's knowledge of Avicenna's *Maqūlāt*, since in the section of *Maqūlāt* devoted to homonyms (I.2) Avicenna effectively deals with polyonyms and heteronyms¹⁶. However, other possible ways to explain this passage have been proposed. For instance, C. Steel

¹⁴ Avicenna's *Nafs* was translated in Toledo in the XII century by Gundissalinus and Avendeuth. This translation is extant, and edited in two volumes: AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V, ed. by S. VAN RIET, Peeters - Brill, Louvain-la-Neuve 1968; AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* I-III, ed. S. VAN RIET, Peeters - Brill, Louvain-la-Neuve 1972. For Albert's quotation, see ALB., *De praed.*, I.4, p. 11.20; the doctrine quoted there by Albert seems, however, not to be exactly traceable in the *De anima* (see the editors' note *ad loc.*).

¹⁵ Namely, Albert's commentary on the first chapter of the *Categories* (ARIST., *Cat.*, 1, a1-15).

¹⁶ GRIGNASCHI, *Les traductions latines* cit., pp. 69-70. For Avicenna's discussion of homonyms and synonyms, and particularly his treatment of *multivoca* and *diversivoca*, see *Maqūlāt*, I.2 (pp. 9.1 - 17.14, notably pp. 15.16 - 16.3). Avicenna's reworking of *Cat.*, 1 is dealt with by A. BÄCK, *Avicenna the Commentator*, in NEWTON ed., *Medieval Commentaries on Aristotle's Categories* cit., pp. 31-71.

and S. Donati, in their critical edition, mention R. Andrews' suggestion that it may be possible to read 'Augustinus' instead of 'Avicenna' here — on the basis of a similar emendation made by them further in the text¹⁷. As the pseudo-augustinian treatise entitled *Categoriae decem* also reports this doctrine, this solution is certainly viable¹⁸; nonetheless, it seems not to be sufficiently supported by manuscript evidence (as witnessed by the editors' choice of maintaining 'Avicenna'). Janssens, instead, proposes to identify the true referent of this quotation with the sole al-Ġazālī, on account of the following considerations: since the Ghazalian text familiar to Albert is the Latin translation of the *Maqāṣid al-falāsifa*, which — as is known — draws on Avicenna's *Dānešnāme-ye 'Alā'ī*, it is evident that Albert holds Ġazālī to be a follower of Avicenna (so as to call him, in the commentary on the *Metaphysics*, *abbreviator Avicennae*¹⁹). Since the 'logic' of Ġazālī's *Maqāṣid*, even in the Latin translation, reports the doctrine of polyonyms and heteronyms, it is not unlikely that Albert held this section to be derived from a corresponding section of Avicenna's commentary²⁰.

¹⁷ ALB., *De praed.*, IV.7, p. 93.51-61: «Ex his autem quae dicta sunt, quod scilicet relativa ad convertentiam dicuntur, sequitur aliud proprium relativorum, quod est quod relativa sive ea quae sunt *ad aliquid*, *videntur simul esse natura*. Quod autem secundum convertentiam dicuntur et quod simul sunt natura differunt in hoc quod convertentia est secundum mutuam relationem eorum ad invicem in appellatione et casu, sed simul esse natura est in hoc quod, secundum quod relativa sunt, in esse et non esse sive in ortu et occasu, ut dicit Augustinus (Jammy, Borgnet: Avicenna), sunt simul, ita quod posito uno in esse, secundum quod relativum est, ponitur et aliud, secundum quod refertur ad istud, et destructo uno, secundum quod relativum est, destruitur et aliud secundum relationem, secundum quam refertur ad istud ». In this passage the doctrine is attributed to Avicenna, according to the text of Jammy's and Borgnet's editions; the reason for the error seems to be the mistaken reading of an abbreviation. As a consequence, Grignaschi included this quotation in his dossier (*Les traductions latines cit.*, pp. 72-73). Once we accept, with the editors of the *coloniensis*, the reading 'Augustine', the source is then clearly identifiable with the ps.-Augustine's *Categoriae decem* (*Aristoteles Latinus*, I.1-5, p. 155.12-17: «Tunc ergo et vere et proprie 'ad aliquid' dicitur cum sub uno ortu atque occasu et id quod iungitur et id cui iungitur invenitur »; the expression *in ortu et occasu* is also attributed to Augustine by R. Kilwardby, *Notulae*, p. 86, 13-15 [ed. CONTI]: « Unde 'simul natura' dicitur hic ut simul natura dicitur esse ab Augustino, simul esse secundum ortum et occasum; haec enim posita se, ponunt, destructa se, destruant »). The reference to Andrews in the critical edition occurs at p. 10, in the note to lines 19-21.

¹⁸ ARISTOTELES LATINUS, I.1-5, p. 136.10-25.

¹⁹ See for instance ALB., *Metaphys.*, I [I. I-V], p. 217.28. On this point see A. BERTOLACCI, *Subtilius speculando. Le citazioni della Philosophia prima di Avicenna nel Commento alla Metafisica di Alberto Magno*, «Documenti e studi sulla tradizione filosofica medievale», 9, 1998, pp. 261-339 (in particular pp. 333-334).

²⁰ Ġazālī's *Maqāṣid al-falāsifa* were translated into Latin in the XII century, under the title *Summa theorie philosophie*, by Gundissalinus and a certain 'Magister Johannes': the logical section has been edited by C. Lohr (*Logica Algazelis. Introduction and Critical Text*, «Traditio», 21, 1965, pp. 223-292), the physical and metaphysical section has been edited by J. T. Muckle (*Algazel's Metaphysics. A Mediaeval Translation*, ed. by J. T. Muckle, Pontifical Institute of Mediaeval Studies, Toronto 1967). Algazel's discussion of *multivoca* and *diversivoca* is found in LOHR, *Logica Algazelis*, p. 246.79-82: «Diversivoca sunt multa nomina eiusdem rei, ut 'ensis', 'mucro', 'gladius'. Multivoca sunt multa nomina multarum rerum, ut 'equus' et 'asinus', quae sunt singula singularum rerum ».

This hypothesis is also corroborated, as Janssens remarks, by the fact that the examples mentioned by Albert for polyonyms are identical with those found in Algazel's *Logica*²¹. To Janssens' convincing arguments I add that Albert might have at least surmised the existence of an Avicennan treatment of the *Categories*, from the retrospective references which are sometimes found in the sections of the *Šifā'* he certainly knew, for instance in the *Ilāhiyyāt*, Avicenna's *Metaphysics*²². A clear reference of this kind is found at least in the beginning of *Ilāhiyyāt*, III.1, a chapter devoted to verifying the accidental existence of the main four accidental properties, i.e. quantity, quality and relation: here Avicenna explicitly recalls the treatment of the accidental categories carried out «in the beginning of logic» (*in principio logicae*)²³.

In the same chapter of the *De praedicamentis*, Grignaschi finds what he holds to be another possible reference to Avicenna's *Maqūlāt*; the context is Albert's discussion of synonyms and, consequently, of synonymous predication. After commenting on Aristotle's claim that man and ox share the same notion of 'animal', Albert argues that the principle of synonymous predication does not exclusively apply to genera, species and differentiae, but also to the 'accidental' predicables such as property and common accident. As a source for this doctrine, he cites Avicenna and Ġazālī:

T2: ALBERT, *De praed.*, I.3, p. 9.11-14:

«[...] unde, si quis assignet utriusque ratione, hominis scilicet et bovis, secundum hoc quo sunt animalia, hoc est secundum naturam, de qua notam facit nomen commune, quod est animal, eandem de necessitate assignabit utriusque, hominis

²¹ JANSSENS, *Albert le Grand et sa connaissance* cit., p. 244. Algazel's examples ('ensis, mucro, gladius') are effectively identical with those found in ALB., *De praed.*, I.3, p. 10.24-25 ('ensis, mucro, spata, gladius').

²² Avicenna's *Ilāhiyyāt* was translated into Latin, probably by Gundissalinus, in Toledo. A critical edition of this translation is available: AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina*, I-IV, ed. S. VAN RIET, Peeters - Brill, Louvain-la-Neuve - Leiden 1977; AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina*, V-X, ed. S. VAN RIET, Peeters - Brill, Louvain-la-Neuve - Leiden 1980; AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina*, *Lexiques* by S. VAN RIET, Peeters - Brill, Louvain-la-Neuve - Leiden 1983. Albert the Great's reception of Avicenna's metaphysics has been studied in detail by BERTOLACCI, *Subtilius speculando* cit.; ID., *Le citazioni implicite testuali della Philosophia prima di Avicenna nel Commento alla Metafisica di Alberto Magno: analisi tipologica*, «Documenti e studi sulla tradizione filosofica medievale», 12, 2001, pp. 179-274; ID., *The Reception of Avicenna's Philosophia prima in Albert the Great's Commentary on the Metaphysics: The Case of the Doctrine of Unity*, in W. SENNER ET AL. ed., *Albertus Magnus 1200-2000. Zum Gedenken nach 800 Jahren: neue Zugänge, Aspekte und Perspektiven*, Akademie Verlag, Berlin 2001, pp. 67-78.

²³ AVICENNA LATINUS, *Philosophia prima* I-IV, p. 104.5-11: «Necesse est igitur ut procedamus ad certificandum accidentia et stabiliendum ea. Dicam igitur quod in principio logicae iam cognovisti quidditatem decem praedicamentorum [...]».

scilicet et bovis, *rationem* diffinitivam. Et similiter est de Socrate et Platone in hoc nomine 'homo'. Et sic est in omnibus, quae ut genus vel ut species vel ut differentia vel ut proprium vel etiam ut accidens sub eodem nomine praedicantur, ut dicunt AVICENNA ET ALGAZEL ».

Grignaschi sees a plausible source for this quotation in *Maqūlāt*, I.2, notably in a passage where Avicenna explicitly denies that only genus, species and differentia are predicated synonymously:

T3: AVICENNA, *Maqūlāt*, I.2, p. 15.2-5:

«It is absolutely not as it was thought, namely that only genus, species and differentia are those which fall synonymously [on their subjects], and the others not; this because synonymy is not such because of the notion's being essential, but because of its being one in meaning, and not differentiated. This unity may exist in what is essential, and may [also] exist in what is accidental, such as properties and common accidents»²⁴.

Grignaschi's mention of this passage is certainly appropriate, since it undoubtedly states what Albert ascribes to Avicenna; however, the idea that even accidental universals are predicated synonymously is already rooted in Avicenna's *Madḥal* (*Logica*), where it is alluded to more than once²⁵. This does not make it necessary to hypothesize Albert's direct knowledge of Avicenna's *Maqūlāt*, though there — for sure — this idea is reprised and developed²⁶; nor to figure out, as Janssens does, a construction of other passages from the *Logica*²⁷. What is truly problematic seems to be — instead — the mention of Algazel, whose *Logica* does not apparently report such a doctrine²⁸; I guess that he might be

²⁴ For another translation of this and the following passages from *Maqūlāt*, see the recent English version published by A. Bäck (AVICENNA/IBN SİNĀ, *Al-Maqulat. Commentary on Aristotle's Categories*, Philosophia Verlag, München 2016).

²⁵ See for instance *Logica*, p. 9va, where it is said that all of the five predicables are predicated in the same way (namely, synonymously): «haec quinque praedicantur uno modo, sicut iam saepe diximus» (*Madḥal*, I.14, p. 85.11-12); *Logica*, p. 10ra (*Madḥal*, II.1, p. 91.12-19). For Avicenna's account of synonymous predication in the *Madḥal* of the *Šifā'*, see S. DI VINCENZO, *Avicenna's reworking of Porphyry's 'common accident' in the light of Aristotle's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 163-194.

²⁶ This occurs not only in chapter I.2, but also in chapter I.3: see N. CAMINADA, *A quotation of an anonymous 'logician' in Avicenna's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 195-237.

²⁷ JANSSENS, *Albert le Grand et sa connaissance cit.*, pp. 244-245.

²⁸ As Janssens remarks (*ibid.*) there is, in Algazel's *Logica*, nothing more than a division of the universals (LOHR, *Logica Algazelis*, pp. 249.90 - 252.190).

mentioned here by Albert, however, in order to reinforce Avicenna's authority, as a further instance of the doctrinal agreement that Albert always sees between Avicenna and Algazel (as presumably happens elsewhere, in *De praed.* as well as in other Albertine commentaries)²⁹.

2. SUBSTANCE AND SUBSTANTIAL CHANGE

As regards the second treatise of Albert's *De praedicamentis*, devoted to the category of substance, Grignaschi confesses he was not able to find real doctrinal similarities between it and the corresponding sections of Avicenna's *Maqūlāt* (ch. III 1-3)³⁰. It is indeed clear that, in this section, Albert seems not to have borrowed relevant doctrinal elements from Avicenna's *Categories*; of the four explicit quotations of Avicenna found here, three are surely related to the *Ilāhiyyāt* of the *Šifā'* and the *Logica (Madḥal)*³¹. For the last case only Grignaschi suggests a textual parallel: it concerns Albert's discussion of one of the properties which Aristotle accords to substance, namely not being receptive of more and less (and the related issue of substantial change). Among the authorities mentioned in favour of this doctrine, Albert recalls Porphyry and Avicenna:

T4: ALBERT, *De praed.*, II.10, pp. 40.54 - 41.9:

«Et hoc modo substantia non potest suscipere magis et minus, cuius causa in SCIENTIA DE UNIVERSALIBUS reddita est a PORPHYRIO, quia esse substantiale semper idem et simplex est, et ideo non potest suscipere magis et minus, quia, sicut probat AVICENNA, si magis susciperet, tunc in eo magis susciperet, quod ipsum esse substantiale plus formae substantiali appropinquaret per ipsius formae adeptionem, quod falsum est, cum nihil medium habeat; inter esse enim et non esse nihil est medium, sicut inter album et nigrum multa sunt media. Et ideo secundum esse substantiale non potest esse intensio et remissio in aliquo».

As to the mention of Porphyry's 'science of universals', the source is clear: in the chapter of the *Isagoge* on *differentia* Porphyry, after distinguishing between separable and inseparable differences, subdivides these latter into *per se* and *per accidens*; he then says that inseparable differences *per se*, which may be said 'substantial' (i.e. constitutive of the essence of a thing), do not admit of more and

²⁹ A. Bertolacci, for instance, records a similar case in Albert's *Metaphysics*, and makes the hypothesis that Albert mentions *Algazel* only because of his constant agreement with Avicenna's opinion (*Subtilius speculando* cit., p. 275).

³⁰ GRIGNASCHI, *Les traductions latines* cit., p. 70.

³¹ ALB., *De praed.*, II.1, p. 21.53-60 and II.3, p. 25.55-64 (related to the *Philosophia prima*); II.8, p. 38.16-19 (related to the *Logica*).

less; and the same holds for genera. If genera and differences, which constitute the definition and essence of a thing, do not admit of more and less, 'being' itself (εἶναι, which is presumably to be understood as 'essence') does not admit of more and less³². The same point is made in the second part of the *Isagoge*, as Porphyry clarifies the common features of the predicables 'difference' and 'accident': here it is said that differentiae do not admit of more and less, while accidents do³³.

As to the likely source of Avicenna's quotation, Grignaschi mentions a short passage from chapter III.3 of Avicenna's *Maqūlāt*, devoted to the properties of substance; here Avicenna explains the fact that substances do not admit of more and less as depending directly on the fact that substances have no contraries, since the more and the less are only found in between contraries³⁴. Though not unrelated to Albert's point, this passage does not fit very well as the *locus* supposedly quoted by Albert, since it never refers to the absence of intermediates, which instead plays an important role in Albert's account. Grignaschi could have mentioned another passage, found only a few lines below, where Avicenna states — in convoluted terms — that change in substance may only occur abruptly:

T5: AVICENNA, *Maqūlāt*, III.3, p. 107.8-10:

« Moreover, the way of contrariety which was not severely denied to substances, belongs to what does not allow the progression from some [substances] to others according to intension and remission. Thus, not all contraries are such that the transition from some of them to others occurs in such a way³⁵; but sometimes it happens all at once ».

³² ARISTOTELES LATINUS, I 6-7, p. 16.1-12: « Illae igitur quae per se sunt, in substantiae ratione accipiuntur et faciunt aliud; illae vero quae secundum accidens, nec in substantiae ratione dicuntur nec faciunt aliud, sed alteratum. Et illae quidem quae per se sunt non suscipiunt magis et minus, illae vero quae per accidens (vel si inseparabiles sint) intentionem recipiunt et remissionem; nam neque genus magis et minus praedicatur cuius fuerit genus, neque generis differentiae secundum quas dividitur; ipsae enim sunt quae uniuscuiusque rationem {definitionem} complent, esse autem unicuique unum et idem neque intentionem neque remissionem suscipiens est, aequum autem esse vel simile vel coloratum aliquo modo et intenditur et remittitur », (PORPH., *Isag.*, p. 9.14-18 Busse).

³³ ARISTOTELES LATINUS, I 6-7, p. 29.13-14: « Et differentia quidem inintendibilis est et inremissibilis, accidentia vero magis et minus recipiunt » (PORPH., *Isag.*, p. 20.3-5 Busse).

³⁴ AVICENNA, *Maqūlāt*, III.3, p. 107.1-3: « This property (i.e. the fact that substances have no contraries) is followed by another one, namely the fact that substance does not admit of more and less. For what becomes 'more' [of something], intensifies from a certain state which is contrary to the state towards which it intensifies; hence, it does not cease leaving the state of weakness little by little, being directed towards strength, or [leaving] the state of strength, being directed towards the state of weakness ».

³⁵ I.e., according to intension and remission.

The 'way of contrariety' which must not be totally denied to substances is contrariety without intermediaries, which admits of abrupt changes (instead of gradually deployed ones). Therefore, even if we accept that substance has contraries, its contrariety does not necessarily entail a variation in degrees.

Otherwise, as Porphyry's statement concerning the unity and unchangeability of being is reprised by Avicenna in the *Madḥal*, the relevant passage in this latter may be seen as a likely source for Albert (as it is, in fact, according to Janssens and the critical editors)³⁶:

T6: AVICENNA, *Logica*, p. 9r a-b (= *Madḥal*, pp. 80.15 - 81.6):

«Dicemus autem nunc quod essentia uniuscuiusque rei una est. Oportet ergo ut essentia rei nec augeatur nec minuatur. Si enim esse rei et essentia esset idem quod est minimum³⁷ inter terminos antedictae divisionis; sed quod est augmentatum est praeter diminutum; tunc augmentum est praeter esse rei. Similiter si esse eius esset id quod est diminutum; similiter si esset esse mediocre. Intentio autem communis tribus quae non est una numero non est ipsa essentia rei quae est una numero. Non enim potest dici quod augmentatum et diminutum conveniant in una intentione quae sit essentia; ergo essentia rei non recipit magis et minus. Si autem augeatur, constituitur eius essentia ex eius augmento; tunc eius essentia est magis. Si vero eius essentia non constituitur ex aumento sed ex diminutione, tunc eius essentia est minus; si vero ex nullo eorum constituitur, tunc non est constituta ex augmento aut diminutione: sed ex intentione communi»³⁸.

Avicenna's argument here is the following: since essence is one by number, it cannot admit of more and less. The reason for this is the fact that, being the

³⁶ JANSSENS, *Albert le Grand et sa connaissance* cit., pp. 245-246.

³⁷ The Venice print has here *verum*, as a translation for the Arabic *anqas* (lesser); however, at least one Latin manuscript (Napoli, Biblioteca Nazionale VIII.E.33) reads *minimum*, which seems more correct and preferable. I thank Françoise Hudry for the information about the Naples manuscript, which is the basis of her forthcoming critical edition of Avicenna's *Logica* (*Logica Avicennae. Traduction latine médiévale de Avicenne, aṣ-Ṣifā', al-Madkhal*. Édition critique annotée accompagnée d'une recherche des sources grecques, par F. HUDRY, Paris, Éditions Vrin, coll. Sic et Non).

³⁸ The original Arabic reads as follows: «We now say that the essence of every thing is one, so the essence of every thing must not become more, nor less; for if the quiddity, and the essence of a thing is the lesser among the limits of augmentation and diminution, and the bigger is other than the lesser, then the bigger is other than the essence [of the thing]. Likewise if the thing were the bigger, and the intermediate. As to the notion shared by the three [of them], which is not one numerically, but by generality [*bi-l- 'umūm*, omitted in the Latin], it is not the essence of the thing, numerically one; so you cannot say that the more, the less and the intermediate share in a single meaning which is the essence of the thing. Therefore, the essence of the thing does not undergo augmentation and diminution; so, what is constitutive of the essence does not undergo augmentation and diminution [*fa-mā kāna muqawwiman li-ḍātihī lā yaḥtamilu li-ziyādata wa-l-nuqṣāna*, omitted in the Latin].

two limits of intensification and weakening different things, the essence may not correspond to both things (as intensified entities do, though in different times) without losing its numerical unity; the same would hold for the intermediate states (which again, on their part, are different from the extremes). I think that there are reasons to dismiss this passage as a potential source of Albert's quotation: first, it does not present a doctrine such as that attributed to Avicenna in T4, since the point in Albert's quotation is the absence of intermediate states in substantial change (which is not the case here); secondly, at least in a truly Avicennan perspective, 'essence' is not identical with 'substance': the argument in T6 applies, thus, to the essence of every being endowed with a genus and a difference (even accidents), contrary to what Albert reports. It is true, however, that Albert also uses *substantia* and *substantialis* in the sense of 'essence' and 'essential', which might justify the two notions' overlap in this context. Janssens convincingly suggests that this passage needs to be completed by means of another source, namely the *Physics* of the *Šifā'*, where the immediate nature of substantial change is actually stated very clearly (and widely discussed, in the third chapter of the second book)³⁹:

T7: AVICENNA LATINUS, *Liber primus naturalium*, II.3, p. 187.16-17 (= *Samā' ṭabī'ī*, II.3, p. 98.9-12):

«Et dicemus quod hoc quod dicimus, quod in substantia est motus, est dictio impropria quia in hac categoria non cadit motus. Natura enim substantialis, cum destruitur, destruitur subito, et cum generatur, generatur subito, et non invenitur inter eius potentiam puram et eius effectum purum perfectio media, quia forma substantialis non suscipit magis et minus».

There are two possible solutions, then: Albert might either, according to Grignaschi's hypothesis, have followed Avicenna's doctrine as expounded in *Maqūlāt*, III.3 (T5); or he might have completed Avicenna's interpretation of Porphyry's passage in the *Madḥal* (T6) with the *Samā' ṭabī'ī* (T7), or a similar passage found elsewhere. Given — however — the substantial difference between the arguments of T6 and T7, and the fact that this latter is closer in meaning and wording to Albert's quotation, the source might be very likely the *Samā' ṭabī'ī* alone⁴⁰. The *Maqūlāt*-

³⁹ JANSSENS, *Albert le Grand et sa connaissance* cit., p. 246. As Janssens remarks, «ici, l'absence d'augmentation ou de diminution dans la forme substantielle est présente *expressis verbis*».

⁴⁰ An implicit quotation of T5, which definitely conveys the sense of Avicenna's argument in the *Logica*, may be found instead in another passage of *De praed.* (I.3, p. 8.43-51: «Et ita et nominata natura et ratio impositionis nominis erit una in talibus, ut sit et ratio substantiae et ratio substantialis eadem simul in his quae sunt univoca et quod illa natura in eis sit participata aequaliter, quod non secundum magis et minus nec secundum prius et posterius sit in ipsis sed uno modo, sicut esse est unum. Quod si magis et minus susciperet, non esset unum omnino, sicut in antehabitis determinatum est et in libro De universalibus»).

hypothesis is, in this case as well, not very economical, since it is possible to trace clearly Avicenna's position in a text certainly known to the Latins.

3. QUANTITY : THE COUPLE LARGE/SMALL AND THE RELATIVE NATURE OF CONTRARIES

In the third treatise of Albert's *De praedicamentis* (*Tractatus de quantitate*) there is only one quotation of interest. The context where it is found is the discussion of the properties of quantity, which is said by Aristotle to have no contraries: as is known, in this section of the *Categories* Aristotle is especially committed to explaining why the couple large/small, which seems to consist of two contrary quantities, is neither a couple of contraries nor a couple of quantities. One of the arguments Aristotle sets forth is the following: since large and small are relative notions, a same thing may be said 'large' with respect to a thing, 'small' with respect to another. If we accept this, and we hold large and small to be contraries as well, we are presented with the paradox of a same thing admitting of two contraries simultaneously, which would lead to the absurd consequence of something being a contrary of itself⁴¹. As an authority on the relative nature of contraries, Albert recalls Avicenna:

T8 : ALBERT, *De praed.*, III.11, pp. 73.61 - 74.1 :

« *Contingit etiam, ut diximus, eadem sibiipsis esse contraria. Nam si magnum parvo est contrarium, sed iam probatum est quod ipsum simul magnum et parvum est, sequitur quod ipsum sibiipsi contrarium est. Et hoc sequitur ex hoc, quia quod comparatum alicui formam recipit contrarii, illud simpliciter habet formam illam, et si alii comparatum habet formam alterius contrarii, sequitur quod simpliciter habet etiam illam, quia contrariae formae, quibus insunt, simpliciter insunt, eo quod non sunt formae comparationis, ut dicit AVICENNA, sed sunt qualitates absolutae.* »

This doctrine — as formulated here — is very interesting, since it mirrors Avicenna's point on this topic in *Maqūlāt*: it needs, therefore, to be discussed in detail. Grignaschi cites, as a source for this passage, the chapter of *Maqūlāt* where Avicenna deals with the properties of quantity (IV.2). After having mentioned the case of the couple large/small, Avicenna makes a general statement concerning all the properties which are wrongly thought to be contrary quantities:

T9 : AVICENNA, *Maqūlāt*, IV.2, p. 137.3-7 :

« Know that the examples that have been mentioned regarding the statement that there is contrariety in quantities, are — all of them — accidents of quantity, and

⁴¹ ARIST., *Cat.*, 5b30–6a11.

they are not quantities, as you have learned; moreover, there is no contrariety in them, for contrariety is only found between two natures, each one of which is intelligible by itself, and then if it is put in relation to the other it is said to be contrary to the other. Like heat and coldness; because each one of them is intelligible by itself, then if it is put in relation to the other it is contrary to it. So, there is a nature to which there accidentally belongs a relation (*iḍāfa*), which is the relation of contrariety ».

There is here no literal correspondence to the distinction, found in Albert, between *forma simpliciter* and *forma comparationis*; still, the doctrine seems to be — after all — the same: contraries are by themselves absolute things, natures intelligible by themselves and are not — by themselves — relative. Albert however does not add explicitly in **T8**, as Avicenna does in **T9**, that contrariety — insofar as it is contrariety — is a super-added ‘relation’ (a point on which Avicenna also insists in *Maqūlāt*, VII.2, a pivotal chapter for his doctrine of the contraries, mentioned by Grignaschi in a note⁴²); it will be clear nonetheless, from a further Albertine reference to *comparationis forma* (see below §4.1, **T11** and the related discussion) that Albert seems to have known the Avicennan doctrine of the relational character of contrariety, a doctrine which apparently prompted him to present Avicenna as an advocate of a conceptualist doctrine of relations. The doctrinal similarity between **T8** and **T9** seems to verify, at least for these passages, Grignaschi’s conjecture; however, Avicenna’s effort towards a coherent and systematic presentation of his philosophy in all his major works, and especially in the *Šifā’*, makes it likely that the same doctrine expounded in one place is alluded to somewhere else; this being the case, other hypotheses must be taken into account to explain Albert’s quotation.

Janssens proposes, as a likely source for **T8**, a passage of *Samā’ ṭabī’ī*, II.3 where Avicenna deals with motion in the category of quantity: this passage does not provide a parallel for the nature of contrariety in general, but presents the idea of ‘absolute’ largeness and smallness in quantitative change (which suits well Albert’s quotation in **T8**)⁴³. We can also take into account another possibility:

⁴² GRIGNASCHI, *Les traductions latines cit.*, p. 71 n. 40. The treatise is here erroneously indicated as ‘fourth’ treatise (*‘Al-maqālatu-r-rābi’ a’*). The chapter is entitled ‘On doubts related to what was said concerning opposition’ (*Fī šukūk talḥaḡ mā qīla fī l-taqābul*); it is the second of a series of two chapters dealing with Aristotle’s theory of opposites (as outlined in *Cat.*, 11b15-13b35. For the relational character of contrariety, see especially *Maqūlāt*, VII.2, pp. 249.12 - 250.1; 252.18 - 253.2.

⁴³ JANSSENS, *Albert le Grand et sa connaissance cit.*, pp. 246-247; *Liber primus naturalium*, II.3, pp. 195.56 - 196.67 (*Samā’ ṭabī’ī*, II.3, p. 102.9-15): « Sed iam dubitatur quod magnum et parvum non sunt contraria, cum motus omnes sint inter contraria, et dicemus ad hoc quod nos non cogimur affirmare quod omnes motus sint inter contraria tantum et non in aliis. Cum enim fuerint aliqua opposita quae non convenient simul et processerit res de uno ad aliud paulatim, vocamus

though the most detailed treatment of opposition and contrariety in the *Šifā'* (and, probably, in the whole of Avicenna's *corpus*) is found in the seventh treatise of *Maqūlāt*, the issue is also discussed in the seventh treatise of the *Metaphysics* (*Ilāhiyyāt*), notably in the first chapter, devoted to the attributes of unity and multiplicity. Most of the discussion of contraries found in this context is aimed at denying that contraries are to be found in different genera; it is true, instead, that contraries are always found in the same genus. While restating this notion of contrariety, Avicenna addresses critically the opinion of some unidentified philosophers, named in Arabic 'the superficial theorists' (*ahl al-ẓāhir min al-naẓar*), who group certain contraries under two genera: *convenientia* (*muwāfaqa*) and *diversitas* (*muḥālaḥa*), according to their being either congruent with the acquisitions of perception and intellect, or their being — instead — incongruent with them⁴⁴. Avicenna argues that all these contraries are not, by themselves, congruent or incongruent, but that they are instead by themselves qualities, upon which some other concomitants or accidents are super-added (for instance relations, in the case of congruence and incongruence):

T10 : AVICENNA LATINUS, *Philosophia prima*, VII.1, pp. 353.87 - 354.10 (= AVICENNA, *Ilāhiyyāt*, VII.1, pp. 306.9 - 307.8):

«Videtur autem quod qui non bene consideraverunt hoc, intellexerunt quod eorum quae sunt contraria et habent genera propinqua sub quibus continentur, quaedam conveniunt in sensu vel intellectu <...>⁴⁵, et quaedam differunt. Et collegerunt ex eis intentionem convenientiae et intentionem diversitatis, et posuerunt unam ex eis genus quorundam, et alteram posuerunt genus aliorum.

illam rem mobilem, quamvis non sit ibi contrarietas. Magnum autem et parvum inter quae movetur vegetabile et arescibile non est ipsum parvum et magnum relatum absolute, sed quasi natura posuerit speciebus sensibilibus et vegetabilibus terminos in magnitudine et terminos in parvitate quos non excedunt et moventur inter eos: ergo magnum ibi erit magnum absolute, et non erit parvum comparatione alterius magni in eadem specie; similiter autem parvum erit parvum absolute ».

⁴⁴ The identity of this group of philosophers is unclear. A. Bertolacci, in the notes to his Italian translation of Avicenna's *Ilāhiyyāt* (*Avicenna, Libro della guarigione. Le cose divine*, UTET, Torino 2008, p. 582), proposes tentatively to identify them with Pythagorean philosophers, since the argument of VII.1 bears some resemblances to a Pythagorean argument refuted by Avicenna in III.6 (p. 128.12-16). For an analysis of this latter argument, see A. BERTOLACCI, *Metafisica A 5*, 986 a22-26 nell' *Ilāhiyyāt del Kitāb al-Šifā' di Ibn Sīnā*, « Documenti e studi sulla tradizione filosofica medievale », 10, 1999, pp. 205-231.

⁴⁵ The Latin text omits part of Cairo, lines 10-11, reading « some are incongruent, some others are congruent in affirmation, others differ in distinction » (« et quaedam differunt et quaedam conveniunt in affirmatione et alia in distinctione », according to S. Van Riet's translation). This passage is expunged by A. Bertolacci, on the basis of manuscript evidence, in his Italian translation of the *Ilāhiyyāt* (*Avicenna, Libro della guarigione cit., Correzioni dell'edizione del Cairo dell'Ilāhiyyāt*, p. 122).

Sed non debet ita esse. Nam sensus convenientiae et diversitatis est <...>⁴⁶ ut, cum posita fuerint quasi duae naturae, invenientur eis aliqua quae diversis respectibus apta sint poni quasi genera eorum. Ipsa enim continentur sub universitate potentiarum agendi et patiendi quodam modo, et sub qualitatibus alio modo, et sub relationibus alio modo. Ipsa enim, secundum hoc quod proveniunt ex rebus quae sunt potentiae agendi, et secundum hoc quod acquiruntur in aliquo ex aliquibus quae sunt potentiae patiendi, et secundum hoc quod de illis quiescunt dispositiones in suis sustentibus, sunt de qualitatibus, sed, secundum hoc quod conveniens est conveniens suo convenienti, sunt de relativis. Cum autem nomen rei quae est de convenientia vel diversitate fuerit reductum ad aliquam istarum intentionum, continebitur sub genere quod est ei proprium. Non dico autem quod una res contineatur sub diversis generibus (hoc enim est quod ego refugio), sed quia diversis respectibus una res est aliud et aliud et continetur in alia parte, nec sunt haec certa genera, sed sunt quasi genera, quia sunt res compositae ex intentione et actione vel passione vel relatione et aliis, et videtur quod in seipsis sunt qualitates, et ceteri respectus comitantur ea ».

The doctrinal core of this text is not identical with the one found in Albert's quotation, but might have inspired it: we find here, clearly spelled, the idea that congruent and incongruent things are 'by themselves' qualities (*in seipsis* [...] *qualitates*), whereas other considerations of them (for instance as actions/affections and relations) are superadded as concomitants. Then, as an alternative to Grignaschi's hypothesis, Albert might either have read *Samā' ṭabī'ī*, II.3, as suggested by Janssens; or he might have found Avicenna's idea that contraries are absolute qualities (as a source for T8) and that contrariety is somehow a relational property of theirs (as a source for T11) in this very passage of the *Ilāhiyyāt*; as to the expression *comparationis forma*, it might have resulted from the parallel reading of another Avicennan passage, which I will discuss shortly (§4.1).

4. RELATIVES

4.1 *Are relatives a category? The matter of Avicenna's conceptualism*

The fourth treatise of Albert's *De praedicamentis*, devoted to the category of relatives, is opened by two chapters, corresponding to two digressions which certainly are to be numbered amongst the most original and interesting pages

⁴⁶ The Latin text omits a part of Cairo, lines 13-14, which reads « [is] the sense of concomitants, since they do not belong to things by themselves but by relation. Then, congruent and incongruent things » (« sensus comitantium quia non sunt rebus in seipsis sed per relationem deinde convenientia et diversa », according to S. Van Riet's translation).

of Albert's commentary⁴⁷. In the first digression Albert, while answering a series of doubts, tries to decide whether relatives may be properly said to be a category; in the second, he reflects again over the ontological status of relations, and on the division of the genus 'relative' into its subordinate genera, species and individuals. The difficulty on which the first digression is based comes from the ancient philosophers' disagreement concerning the generic nature of relatives: according to a certain 'Zeno', and some other unspecified thinkers, relation is not a separate being, but a thing (*res*) or 'notion' (*ratio*) resulting from a 'comparison', or connection (*comparatio*) between two things belonging to other categories, which is 'intermingled' (*immixtum*) with them; since however the categories classify the primary meanings of separate being, and the nature of relatives implies their being 'contaminated' with the other categories, according to them relatives may not be numbered among the highest genera of being⁴⁸. This opinion is confirmed, in Albert's account, by a set of further arguments ascribed to Zeno — except for the last one, which is attributed to Avicenna and al-Fārābī. Before discussing the Avicennan argument, I will sum up the previous ones:

[1] If A is compared to B, it must be compared either by itself or by means of something else; however, it is surely not compared by itself, since otherwise everything would be relative. There must be, then, a certain *ratio* of comparison, C, the existence of which is therefore understood intellectually before a comparison effectively takes place. But what is such as to be intellected before the accident cannot be a genus of the accident. Therefore relatives are not a genus of being⁴⁹.

[2] No true accident may be an accident of something else; thus, since the *comparatio* of relatives accidentally belongs to the other accidents, relatives are not a true accident (a category)⁵⁰.

⁴⁷ Albert's doctrine of relations already was the subject of dedicated contributions: see for instance J. BROWER, *Relations Without Polyadic Properties: Albert the Great on the Nature and Ontological Status of Relations*, « Archiv für Geschichte der Philosophie », 83, 2001, pp. 225-257. Brower also discusses Albert's theory in his entry for the Stanford Encyclopedia of Philosophy (*Medieval Theories of Relations*, in E. N. ZALTA ed., *The Stanford Encyclopedia of Philosophy* [Winter 2015 Edition], URL: <https://plato.stanford.edu/archives/win2015/entries/relations-medieval/>). For an analysis of the main post-albertine theories of relations see M. G. HENNINGER, *Relations. Medieval Theories 1250-1325*, Clarendon Press, Oxford 1989.

⁴⁸ ALB., *De praed.*, 4.1, p. 80.7-14: « Zeno enim et quidam alii hoc praedicamentum dicebant non esse praedicamentum, sed rem vel rationem aliis praedicamentis immixtam ex eorum ad invicem comparatione. Et cum prima genera sint voces prima rerum genera significantes, hoc autem genus non significetur ut ens ab aliis separatum sed ut aliis immixtum, videtur ei quod significatum eius non sit ens, quod sit de primis partibus entis ».

⁴⁹ *Ibid.*, p. 80.15-36.

⁵⁰ *Ibid.*, p. 80.37-40.

[3] Relatives also belong to all things as a consequence of all things' being subdivided into genera and species, or their being wholes and parts; being such a derived property (*coaccidens*) it cannot be a genus for itself⁵¹.

[4] The fact that genera, species and all predicables are found relatively in all things does not imply that generality, specificity, and the like are genera for themselves. For this reason, relatives as well are not to be numbered as an independent genus, but only as a certain accident found in other genera (*generum aliorum quoddam accidens*)⁵².

From all these arguments, somewhat obscure and sophisticated, it may be inferred that Zeno's doctrine identifies relation as a *tertium quid* beyond the relative extremes (which, under many respects, leads to deny to it the status of a category). Though at first he seems to keep the alternative open, whether it has real or mental existence (*rem vel rationem*), argument [1] apparently inclines towards a conceptualist account⁵³.

After the proofs attributed to Zeno and his followers, as I said, Albert proposes a further related argument, attributed to Avicenna and Fārābī. Quite interestingly, this argument again denies to relatives the status of a category, on the basis of a conceptualist theory:

T11: ALBERT, *De praed.*, IV.1, p. 81.4-21:

«Adhuc autem fortius obiecerunt quidam posteriorum sicut AVICENNA et ALFARABIUS dicentes quod nulla forma, quae sit ens, est in re, quae non sit absoluta secundum esse, quod habet in ipsa, sicut patet inducendo de calido, frigido, albo, nigro, dulci, amaro et omnibus aliis; sed comparatio, quae fit rerum ad invicem secundum formas, quae insunt rebus, fit actu rationis, quae dicit quod, in quibus est una qualitas, sunt similia, et in quibus non est una, sunt dissimilia vel differentia; comparationis ergo forma, quae est in his, quae sunt ad aliquid, non est res sed ratio, ut videtur, quae nihil est extra animam comparantis unum alteri. Generalissima prima genera rerum significant; ad aliquid autem non est ens ratum apud naturam extra, sed ens rationis; ad aliquid ergo non potest esse generalissimum».

The mention of Fārābī is certainly doubtful, since in the Farabian works surely known to Albert there is no such indication of Fārābī's belief in the intellectual nature of relatives⁵⁴. As to Avicenna, among the quotations found in the *De*

⁵¹ *Ibid.*, p. 80.41-45.

⁵² *Ibid.*, pp. 80.46 - 81.3.

⁵³ J. Brower (*Relations Without Polyadic Properties* cit., p. 231) also takes most of these arguments to be substantially anti-realist.

⁵⁴ This is also remarked by Janssens: see *Albert le Grand et sa connaissance* cit., p. 247 (where Janssens qualifies Grignaschi's statement as «purement hypothétique»).

praedicamentis this is for sure the most problematic. It seems clear, in fact, from Avicenna's treatment of relatives in the *Ilāhiyyāt*, that he does not hold relations to have a merely intellectual character; on the contrary, he explicitly affirms their ontological reality⁵⁵. Grignaschi, though recognizing that Avicenna is not, strictly speaking, a conceptualist, quotes as a possible source of this doctrine a passage of *Maqūlāt*, IV.3 where Avicenna, according to him, would state that it is easier to conceive of relation as of a mental thing, than of a concrete being⁵⁶. He also mentions another place of *Maqūlāt*, IV.5 which, according to him, could be understood as a denial of the concrete existence of relation⁵⁷. Janssens, like Grignaschi, notes that Avicenna actually denies to relatives a purely intellectual existence, but he holds at the same time that Albert might have taken inspiration from a certain passage of the *Philosophia prima*, which I will discuss shortly⁵⁸.

It must be noted, at first, that Grignaschi misunderstands the Arabic text of the Avicennan sentence he quotes: Avicenna does not say, in the mentioned passage of *Maqūlāt*, IV.3, that relatives are more easily conceivable as existing intellectually; he actually says that the comprehension of *relative things* (*muḍāfāt*), inasmuch as they are concrete things, is easier than the comprehension of *abstract relations* (*muḡarrad al-iḍāfāt*)⁵⁹: that is why Avicenna (and also Aristotle, according to him) speaks of *relatives*, in the context of an introductory work like the *Categories* are. As for the other Avicennan passage, it must be read in its context (in Grignaschi's article only the underlined part is reported)⁶⁰:

⁵⁵ AVICENNA LATINUS, *Philosophia Prima*, III.10, p. 179.31-32: «In signatis autem multa sunt huiusmodi, quia in signatis est ad aliquid». See also the note *ad loc.* in the *editio coloniensis* («notandum est quod Avicenna ipse opinionem repellit alicuius 'sectae' quae tenuit 'quod certitudo relativorum non est nisi in anima cum intelliguntur res'»). The same holds J. Brower (*Relations Without Polyadic Properties* cit.). More in general, concerning Avicenna's doctrine of relatives in *Maqūlāt* and *Ilāhiyyāt*, see H. ZGHAL, *La relation chez Avicenne*, «Arabic Sciences and Philosophy», 16, 2006, pp. 237-286. On the Latin fortune of Avicenna's doctrine on relation see J. DECORTE, *Avicenna's ontology of relation, a source of inspiration to Henry of Ghent*, in J. JANSSENS, D. DE SMET eds., *Avicenna and his heritage. Acts of the international colloquium* (September 8- September 11 1999), Leuven University Press, Leuven 2002, pp. 196-224.

⁵⁶ GRIGNASCHI, *Les traductions latines* cit., p. 72: «À son tour, Avicenne a remarqué qu'il était plus facile de considérer les relations comme un rapport établi par la raison que de comprendre celle qui existent dans les choses».

⁵⁷ AVIC., *Maqūlāt*, IV.5, p. 161.4-8: see below, T12.

⁵⁸ JANSSENS, *Albert le Grand et sa connaissance* cit., p. 247. See below, T12.

⁵⁹ The Arabic reads, in fact (*Maqūlāt*, IV.3, p. 144.1-2): *wa-l-wuqūfu 'alā l-muḍāfāti ashālū 'alā l-ḡihni min al-wuqūfi 'alā muḡarradi l-iḍāfāti llati hiya l-maḡūlatu* («the comprehension of relatives is easier, for the mind, than the comprehension of the abstract relations which are the category»).

⁶⁰ GRIGNASCHI, *Les traductions latines* cit., p. 72 note 45.

T12: AVICENNA, *Maqūlāt*, IV.5, p. 161.4-8:

«Thus, if the relative is that which does have no existence but being relative, it follows that if one of the two extremes is determined in a certain way (*huṣṣila aḥadu tarafayhī taḥṣīlan*) the other is determined because of it; so that if you say ‘double’ absolutely, indeterminately, you figure out in front of it ‘half’, indeterminately; if you say ‘a double that is four’ you figure out in front of it ‘a half that is two’. Our saying ‘determination of the relative’ (*taḥṣīl al-muḍāf*) is an expression by which we [may] understand [many] meanings. We must make a premise, before explaining this: we say that a relative does not have separate⁶¹ existence, but its existence consists of being attached to things; and it is specified by the specification of this being-attached. The specification of this being-attached is understood in two ways: one of them consists of taking the substrate of attachment (*al-malhūq*) and the relation together; so this consists of a category and a category, and it is not a category, but it is composed by a category and a category. The other way consists of taking, as associated with the relation, a certain way of that proper, intellectual being-attached, and of taking them together as a single accident for the substrate of attachment. This is the specification of relation (*tanwīʿ al-iḍāfa*), and its determination».

This passage comes from the second part of chapter IV.5, where Avicenna deals with the second definition of relatives found in *Categories*, 7: relatives as things for which ‘being is the same as being somehow related to something’, in Ackrill’s translation⁶². After highlighting the difference between this definition and the previous one, Avicenna tackles the Aristotelian statement that, according to this latter definition, «if someone knows any relative definitely he will also know definitely that in relation to which it is spoken of» (*man ʿarafa aḥada l-muḍāfayni muḥaṣṣalan, ʿarafa llaḍī ilayhi yuḍāfu muḥaṣṣalan*, in Ishāq b. Hunayn’s Arabic translation)⁶³. He then turns to clarify the meaning of ‘determination’ at stake here: to determine relatives means to ‘specify’ them, in the technical sense, apparently, of ‘dividing into species’ (*tanwīʿ*). Since relation has no independent existence, but is always attached to something, what needs to be specified is the modality of attachment. One possible way consists of specifying the category to which the relation is attached: ‘relation’, when attached to quality, produces ‘similarity’; ‘relation’, when attached to quantity, produces ‘equivalence’; and so on. Avicenna’s statement that this specification is ‘composite’ seems to entail that he is tacitly dismissing it. The second way is formulated in rather

⁶¹ Grignaschi reads *munfarid* instead of *mufrad* (Cairo).

⁶² ARIST., *Cat.*, 8a31-35.

⁶³ K. GEORR, *Les Catégories d’Aristote dans leurs versions syro-arabes*, Institut Français de Damas, Beyrouth 1948, p. 338.3-4.

obscure and vague terms: it implies, apparently, that a relation may be specified intellectually in its own right, in a way which is not dependent on the subject of the relation⁶⁴. The two ways might be exemplified by the beginning of *Ilāhiyyāt*, III.10, where Avicenna presents three ways of dividing relatives: (1) according to their being found in certain categories, (2) according to notions such as 'equality', 'action/passion', 'assimilation' etc.; and (3) in a third way, which depends on the necessity that a certain thing exists in relatives for a relation to subsist between them⁶⁵. Whereas the first way of T12 corresponds to (1), the second way might be interpreted with respect to (2) or (3).

It is however clear that text T12 does not state the intellectual nature of relations: the claim that relatives have no 'separate' existence does not necessarily imply their mental existence (all accidents have, in a larger sense, non-separate existence, but they certainly exist in reality), nor does imply it their possibility of being specified according to a certain 'intellectual' consideration. Although this is sufficient to disprove Grignaschi's hypothesis, both the issue of Avicenna's alleged conceptualism and the reason for Albert's quotation must be inspected more in detail.

A detailed presentation of Avicenna's theory of relation (as expounded in chapter III.10 of the *Ilāhiyyāt*, and in *Maqūlāt*, IV.3-5) would require a contribution for itself: I will try nonetheless to resume it, as to what concerns the scope of the present enquiry⁶⁶. In *Maqūlāt*, IV.3-5 Avicenna refuses explicitly to tackle the question of the existence of relations, since — as he states clearly — it is not worth being discussed in a logical work⁶⁷. In passages such as T12 and its

⁶⁴ This is the conclusion of H. Zghal, who interprets this passage by means of a parallel reading of *AVIC.*, *Ġadal*, V.3, pp. 263.10 - 264.11: « Le recours à ce passage du *Ġadal* permet d'élucider la notion d'une 'spécification idéale du relatif par son mode d'adventon'. Il situe cette diversification à un niveau conceptuel et sans faire intervenir aucune variante empirique. 'Le mode d'adventon' de la relation appartient à la relation elle-même sans que le sujet dont elle peut être l'accident à un niveau factuel, ou le prédicat à un niveau logique, ne soit concerné par sa diversification » (ZGHAL, *La relation chez Avicenne* cit., p. 266).

⁶⁵ *AVIC.*, *Ilāhiyyāt*, III.10, pp. 152.7 - 154.6.

⁶⁶ *Ilāhiyyāt*, III.10 is analysed in M. E. MARMURA, *Avicenna's Chapter 'On the Relative' in the Metaphysics of the Shifā'*, in G. F. HOURANI ed., *Essays on Islamic Philosophy and Science*, State University of New York Press, Albany 1975, pp. 83-99; for a more specific focus on the *Ilāhiyyāt* see also A. БЭК, *Avicenna on Relations and the Bradleyan Regress*, in J. BIARD, I. ROSIER-CATACH eds., *La tradition médiévale des Catégories (XII-XV siècles)*, Éditions de l'Institut Supérieur de Philosophie - Peeters, Louvain-la-Neuve - Louvain - Paris 2003, pp. 69-84. A detailed analysis and comparison of *Maqūlāt* and *Ilāhiyyāt* is found instead in ZGHAL, *La relation chez Avicenne* cit. Avicenna's doctrine of relatives is also briefly discussed in R. STROBINO, *Avicenna on Knowledge ('Ilm), Certainty (Yaqīn), Cause ('Ilā/Sabab) and the Relative (Muḍāf)*, « British Journal for the History of Philosophy », 24, 2016, pp. 426-446.

⁶⁷ *AVIC.*, *Maqūlāt*, IV.3, p. 143.15-16.

follow-up, for the rest, Avicenna insists on the conceptualization of relatives and their intellectual determination; he also states, at a given point, that 'relation' is determined in the intellect (without however suggesting elsewhere that this implies the intellectual existence of relative things)⁶⁸. In *Ilāhiyyāt*, III.10, on the contrary, Avicenna tackles this ontological issue, and presents the doctrines of two different school of thoughts: those who believe that relatives exist in concrete beings, and those who believe that relatives are such only when they are intellected by the mind. He then expounds the arguments of both schools: realists argue that relatives are evidently existent in reality⁶⁹, whereas the conceptualists present two anti-realist arguments. The first is an argument of infinite regress: if 'fatherhood' is a concretely existent relation, which ties the relatives 'father' and 'son', it presupposes the existence of other relations (for example, the inherence of 'fatherhood' in 'father') which in turn presuppose other relations, and so on *ad infinitum*⁷⁰. The second argument is based on the fact that relations may connect something existent and something non-existent (as, for instance, does the relation of priority and posteriority), which demonstrates their exclusively mental existence⁷¹. After presenting these proofs, Avicenna begins a refutation of the first anti-realist argument. He recalls the 'absolute definition' of relatives, namely the first definition found in the *Categories* (according to Ishāq ibn Hunayn's interpretative translation): relative is that which has its quiddity said with respect to something else (*allaḍī māhiyyatuhū innamā tuqālu bi-l-qiyāsi ilā ḡayrihī*)⁷². It is then clear, according to Avicenna, that in concrete reality there are many sensible things bearing such nature; this is, by the way, a tacit confirmation of the argument by self-evidence

⁶⁸ AVIC., *Maqūlāt*, IV.5, p. 163.3.

⁶⁹ AVIC., *Ilāhiyyāt*, III.10, p. 156.8-12 (AVICENNA LATINUS, *Philosophia prima*, III.10, pp. 178.7 - 179.15: « Nos scimus quod haec res in esse est pater illius, et ille in esse est filius eius, sive intelligatur, sive non intelligatur; et scimus etiam quod plantae inquirunt nutrimentum; inquisitio vero est cum relatione aliqua, sed herbae non habent intellectum ullo modo nec apprehensionem, Et scimus etiam quod ipsum caelum est super terram et terra est inferius eo, sive apprehendatur, sive non; et relatio non est nisi ad similitudinem eius quod assignavimus de istis, et haec est rebus, quamvis non apprehendatur »).

⁷⁰ AVIC., *Ilāhiyyāt*, III.10, p. 156.13-18 (AVICENNA LATINUS, *Philosophia prima*, III.10, p. 179.15-23).

⁷¹ AVIC., *Ilāhiyyāt*, III.10, pp. 156.18 - 157.2 (AVICENNA LATINUS, *Philosophia prima*, III.10, p. 179.23-25).

⁷² Ishāq's translation of the *Categories* reads: « It is said of things that they are relative when their quiddities are said with respect to something else, or according to a certain other sort of connection to something else, whatsoever » (in GEORR, *Les Catégories d'Aristote* cit., p. 332.18-19). The original Greek wording conveys a weaker meaning, which does not properly rely on the notion of essence: Πρὸς τι δὲ τὰ τοιαῦτα λέγεται, ὅσα αὐτὰ ὑπὲρ ἑτέρων εἶναι λέγεται ἢ ὁπωσοῦν ἄλλως πρὸς ἕτερον. (« We call relatives all such things as are said to be just what they are, of or than other things, or in some other way in relation to something else »).

attributed, above, to the 'realist' school. He then proceeds to clarify that relatives are always relative *per se*, not in virtue of another — external — relation which accompanies them: it is the very non-existence of a real, intermediate relation which allows him to invalidate the conceptualists' argument. Every relative is such *per se* in concrete reality, and is specified by itself — not by a 'togetherness' or 'being-with'⁷³ other than its own. However, since every relative is such that, when it is intellected, its relative counterpart must be intellected as well, the intellect may invent a super-added relation, which apparently ties the two extremes, but in fact has no correspondence in external reality⁷⁴. Thus, relatives — according to Avicenna — exist in concrete beings, though *sub condicione*, since their existence in concrete reality entails a certain way of conceptualizing them: as a matter of fact, every relative is such that — whenever it is known intellectually — its relative counterpart is also immediately known⁷⁵. Towards the end of the chapter, while discussing the second argument brought forth by the 'conceptualist' school, Avicenna seems to endorse it, thus recognizing that there are some relatives which may only exist intellectually (prior and posterior). It is exactly this acceptance, stated right at the end of *Ilāhiyyāt*, III.10, that Janssens suggests to be a likely source for Albert's quotation in T11. The passage is indeed a good candidate, inasmuch as it presents us with a wording similar to T11:

T13: AVICENNA LATINUS, *Philosophia prima*, III.10, pp. 192.89 - 193.98 (= *Ilāhiyyāt*, III.10, pp. 159.17 - 160.6):

« Scias autem quod res in se non est prius, nisi eo quod est simul cum ea, et hoc species prioris et posterioris est cum utraque sunt simul in intellectu. Cum enim praesentatur in intellectu forma prioris et posterioris, intelligit anima hanc comparisonem incidere inter duo quae sunt in intellectu quoniam haec comparatio est inter duo quae sunt in intellectu. Sed ante hoc, res in se non est prior; quomodo enim erit prior re quae non habet esse? Igitur quae fuerint de relativis secundum hunc modum, non erit eorum relatio nisi in intellectu; nec intelligitur existere in esse secundum hanc prioritatem et posterioritatem ».

⁷³ *Ma 'iyya* (from *ma 'a*, 'with'), meaning a relative's being said and intellected *together with* another thing.

⁷⁴ AVIC., *Ilāhiyyāt*, III.10, p. 158.6-12 (AVICENNA LATINUS, *Philosophia prima*, III.10, pp. 180.52 - 181.62 : « Si autem hoc relatum accipiatur in signatis, habebit esse cum alia re per se, non egens alio cum quod sequitur ipsum; sed ipsa est ipsum cum, vel cum appropriatum specie illius relationis, ut, ad hoc ut intelligatur, egeat intelligi cum praesentatione alterius rei, sicut quidditas paternitatis, inquantum paternitas, est relata per se, non per aliam relationem ligantem. Intellectus enim habet adinvenire aliquid inter ea duo, quasi cum sit extra ea duo, quod aliquid adinvenire formatio non fecit necessarium, sed alius ex respectibus sequentibus, quos facit intellectus. Intellectus enim coniungit res cum rebus, propter diversitatem respectuum, non propter necessitatem »).

⁷⁵ AVIC., *Ilāhiyyāt*, III.10, p. 159.3-6 (AVICENNA LATINUS, *Philosophia prima*, III.10, pp. 181.70 - 182.74).

Still, it must be noted that the expression *comparationis forma* (relative form, or comparative form) in T11 also recalls *De praed.* III.11 (T8), where it was mentioned with regard to contraries. Likewise, it must be observed that the examples attributed to Avicenna and Fārābī in T11 concern again, as in T8, contrary qualities (hot and cold, black and white, sweet and bitter), intellected as relative inasmuch as they are ‘similar’ or ‘dissimilar’. Moreover, the distinction between ‘similar’ and ‘dissimilar’ in T11 might echo, superficially, the one between *convenientia* and *diversitas* which I highlighted in the aforementioned passage of *Ilāhiyyāt*, VII.1 (T10). On account of all this, Albert’s quotation in T11 might be inspired by the same source of T8, without necessarily depending on a reading of *Ilāhiyyāt*, III.10; or else, more likely, Avicenna’s doctrine of *comparationis forma* could be the result of a parallel reading, on Albert’s part, of T10 and T13. In any case, Albert would make recourse in T11 to texts of Avicenna’s *Ilāhiyyāt*, without any involvement of *Maqūlāt*.

To sum up, there may be found, in Avicenna’s ‘realist’ account of relatives, some concessions to conceptualism: first, the fact that the existence of relatives entails their being conceptualized in a certain manner; secondly, the notion of a super-added relation made up by the intellect, as it knows two relatives together, to justify their existential interdependence; thirdly, the acceptance of some merely intellectual types of relatives, such as priority and posteriority (as objected by conceptualists themselves). The fact remains, however, that in *De praed.*, IV.1 Albert presents Avicenna’s thought in a simplified, distorted and apparently instrumental fashion. Zeno and his followers deny to relatives the status of a category, which Avicenna never does explicitly; they hold relation to be an intermediate entity subsisting between its extremes, which Avicenna expressly denies more than once⁷⁶. If this distortion is unintentional, it is nothing but a simple misunderstanding, eased by the objective difficulty of Avicenna’s explanations in the *Ilāhiyyāt*. If, on the other hand, it is conscious and intentional, as I am more inclined to believe, there is reason to see here on Albert’s part a dialectical or even rhetorical use of quotations. This is made particularly clear by the follow-up of the text, as Albert remarks that the ‘intellectual’ conception of relatives was supported by almost all philosophers except Plato, Aristotle and himself⁷⁷. Albert might well have presented Avicenna

⁷⁶ AVIC., *Ilāhiyyāt*, III.10, pp. 154.7 - 155.16 (AVICENNA LATINUS, *Philosophia prima*, III.10, pp. 175.20 - 177.95); *Maqūlāt*, IV.5, pp. 163.11 - 164.5.

⁷⁷ ALB., *De praed.*, IV.1, p. 81.22-31: «Ex his et similibus rationibus moti fuerunt antiqui et fere omnes praeter Platonem et Aristotelem, qui dixerunt ad aliquid non esse genus, quod sit prima pars accidentis vel una de primis, sed dixerunt ipsum ex habitudinis aliorum generum ad invicem per actum rationis comparantis unum ad alterum omnibus aliis esse immixtum. Et haec opinio corda adhuc obtinuit multorum, ita quod dicunt ad aliquid non esse unum de generibus primis, sicut tangit Averroes super V primae philosophiae Aristotelis». Albert’s mention of Plato may be justified by the fact that the first definition of relatives found in *Cat.*, 7 is often attributed, in the exegetical tradition, to Aristotle’s teacher (see BOETHIUS, *In Cat. Arist.* 2, PL 64, p. 217C).

as an illustrious advocate of the opposite doctrine so as to stress, somehow, his own independence; or, as J. Brower has suggested, he might have thought Avicenna to provide a potentially strong argument in favour of the conceptualist view⁷⁸. For cases like this, however, Albert's distortion of Avicenna's thought might also be a signal of the effective unavailability to him of an Avicennan treatment of the *Categories*, and the result of Albert's attempt to 'reconstruct' *ex post* Avicenna's doctrine on the basis of other texts.

That this is an instrumental way of quoting Avicenna, and that Albert has instead well understood Avicenna's doctrine, is made clearer, in my opinion, both (a) by the follow-up of Albert's discussion, where Avicenna is quoted again, this time as a favourable source, and (b) by Albert's own conception of relatives, as expounded in *De praed.*, IV.1 and in his commentary on the *Metaphysics*, which seems positively influenced by Avicenna's true position.

(a) After presenting the wrong opinions of Zeno and his followers it is necessary, according to Albert, to re-establish the truth: relatives are a genus, and one of the highest accidental genera. There are, as a matter of fact, two sorts of accidents: those which are absolute, and simply accompany the being of the subject in its substance, like quantity and quality; and those which accompany the thing on account of something extrinsic, which is related to substance itself; among these, there are relatives. The promoters of this bipartition of the accident are, according to Albert, Porphyry, Aristotle and Avicenna:

T14: ALBERT, *De praed.*, IV.1, p. 81.32-53:

«Nos autem Platoni et Aristoteli consentientes dicimus ad aliquid esse generalissimum et esse unum de primis generibus accidentis, eo quod tam PORPHYRIUS quam etiam ARISTOTELES et AVICENNA dicunt quod accidens, duobus modis praedicatur de eo, cuius est accidens, et duobus modis causatur a subiecto. Quoddam enim est forma absoluta et non per aliud est accidens, nisi quia in subiecto sequitur perfectum esse subiecti in suis substantialibus; et ideo est accidens, quia non potest esse de substantia rei, quod perfectum esse sequitur, et sic quantitas est accidens et qualitas et huiusmodi. Quoddam autem est accidens, non quia sequatur esse rei perfectum, sed quia sequitur ad rem non gratia substantialium, sed ex aliquo quod est extrinsecus se habens ad rei substantialia, sicut ad hoc, quod aliquid sic se habet ut primum et aliud ut secundum vel unum ut totum et aliud ut pars vel ut conveniens vel differens ab illo, sequitur ab extrinseco quod unum sit comparabile ad aliud secundum ipsam rem. Quae comparatio ad actum reducitur, quando actu per rationem comparantur. Et a tali accidente, quod sic accidit rebus, proprie causatur ad aliquid [...]».

⁷⁸ BROWER, *Relations Without Polyadic Properties* cit., p. 234: «Although Albert traces this anti-realist objection to Avicenna and Alfarabi, it is unclear from the text whether he thinks these philosophers actually reject realism, or merely supply the most powerful objection to it ».

Being Porphyry the first mentioned authority, the editors thought Albert to be referring to the distinction between separable and inseparable accident, found both in Porphyry's *Isagoge* and in Avicenna's *Logica*⁷⁹. In this latter text, moreover, the terms of the distinction resemble those employed by Albert in this chapter of the *De praedicamentis*⁸⁰. This distinction, however, is by itself not easily and coherently applicable to the distinction alluded to by Albert, which rather seems to be a sort of division of the accidental categories. Albert might have overlapped to the Porphyrian distinction⁸¹ another two-fold division of the accidents, that which is found in the metaphysical section of Ġazālī's *Maqāṣid* (actually corresponding to the brief 'division' of accidental categories found in Avicenna's *Dānešnāme-ye 'Alā'ī*)⁸². The bipartition between accidents conceptualized by themselves, and accidents conceptualized in relation to something else is also the basis of the more articulate division of the categories found in Avicenna's *Maqūlāt*⁸³. It is — however — difficult to explain the attribution of this doctrine to Avicenna only (not also to Algazel), unless we hold either that Albert was able to hypothesize the Avicennan character of this doctrine because of its presence in Ġazālī's text, or that he actually read Avicenna's *Maqūlāt*.

(b) As to Albert's own conception of relatives, it might be influenced by Avicenna's doctrine, and would thus betray a much deeper understanding of *ilāhiyyāt*, III.10. As a matter of fact, Albert's solution presents us with the same 'intermediate' ontological character as Avicenna's:

⁷⁹ PORPH., *Isag.*, pp. 12.23 - 13.3 Busse (ARIST. LAT., p. 20.7-12): « Accidens vero est quod adest et abest praeter subiecti corruptionem. Dividitur autem in duo, in separabile et in inseparabile; namque dormire est separabile accidens, nigrum vero esse inseparabiliter corvo et Aethiopi accidit (potest autem subintellegi et corvus albus et Aethiops amittens colorem praeter subiecti corruptionem) ».

⁸⁰ AVIC., *Logica*, p. 4vb. The distinction is also found in Ġazālī's *Logica*: pp. 248.72 - 249.88.

⁸¹ Another distinction alluded to here could be the Stoic distinction between πρὸς τι and πρὸς τί πῶς ἔχοντα, variously found in the late ancient commentaries on the *Categories*; I thank an anonymous referee for bringing this point to my attention.

⁸² ALG., *Philosophia*, pp. 19.15 - 20.8 Muckle: « Necessarium est dividere accidentia, post divisionem substantiarum; primum autem dividuntur in duo, quoniam quedam eorum sunt quorum essentia nullo modo per se potest intelligi, nisi aliquid aliud extrinsecus intelligatur; et quedam eorum sunt que per se intelligi possunt; et hec dividuntur in duas species, quantitatem scilicet et qualitatem [...] Ea vero que non possunt per se intelligi sine respectu aliorum, septem sunt, scilicet relacio, ubi, quando, situs, habere, agere et pati ». The corresponding passage of Avicenna's *Dānešnāme* is the following: AVICENNE, *Livre de science*, trad. M. ACHENA, H. MASSÉ, Les Belles Lettres, Paris 1955-1958, vol. I, pp. 108-110.

⁸³ AVIC., *Maqūlāt*, II.5, pp. 84.4 - 86.12. A recent discussion of Avicenna's division of the categories is found in P. THOM, *The division of the categories according to Avicenna*, in A. ALWISHAH, J. HAYES eds., *Aristotle and the Arabic tradition*, Cambridge University Press, Cambridge 2015, pp. 30-49.

T15 : ALBERT, *De praed.*, IV.1, p. 82.34-45 :

« Ad hoc autem quod posterius obiciunt, dicendum videtur quod comparisonem dupliciter est considerare, secundum aptitudinem scilicet et secundum actum. Secundum aptitudinem quidem est in rebus [...]. Secundum actum autem comparatio est in ratione vel anima comparantis, et actus ille non facit quod non secundum aptitudinem sit in rebus comparatis, et ideo secundum aptitudinem quidem est in rebus, secundum perfectionem autem est in ratione. Et hoc multos decepit in isto praedicamento ».

Relative things do have, in concrete reality, a certain *aptitudo* (which we could understand as 'predisposition') to being relative, which is perfected when they are intellected. Relations are not, therefore, entirely intellectual entities : though the *perfectio* of their being lies in their being intellected, they are by themselves already disposed to being relative, in extra-mental reality. Furthermore, in his commentary on the *Metaphysics*, Albert states even more clearly that relations as such exist in the mind, but there are concrete, individual *respectus* which inhere in relative things⁸⁴. Albert's position resembles then Avicenna's true doctrine, in that Albert holds relatives to be somehow existent in reality, but also to have a certain, complementary intellectual realization.

4.2 *Sense-perception and the animal soul*

There are two further passages, in the fourth treatise of *De praedicamentis*, which are held by Grignaschi to draw directly on Avicenna's *Maqūlāt*. The first (ch. IV.7), which I have already briefly mentioned, is not an Avicennan quotation, since the reading 'Avicenna' has to be corrected, according to the manuscripts, in 'Augustinus'⁸⁵. The second, in the same chapter, concerns Aristotle's arguments on the simultaneous existence of relatives. In fact, in the *Categories* Aristotle mentions two cases of relatives which seem to contradict this rule. The two cases are that of the couple 'knowable-knowledge' and that of the couple 'sensible-sensation': the knowable is prior to knowledge, since whereas the knowable may exist even without knowledge, there can be no knowledge without something knowable. The same also holds for sensible and sensation: if a sensible is destroyed, sensation is destroyed as well; but, if sensation is destroyed (for instance, if an animal capable of perception dies) what is sensible

⁸⁴ ALB., *Metaph.*, V.3.7, p. 266.79-83 : « Et ideo relatio, ut dicunt, est in anima; respectus autem est res signata in re ipsa, et hic respectus communi nomine significatur, cum dicitur ad aliquid, et hoc modo est et ens et genus quoddam entis ».

⁸⁵ See above, §1.

remains⁸⁶. With regard to Aristotle's remark that 'an animal and perception come into existence at the same time'⁸⁷, Albert briefly quotes a corresponding doctrine of Avicenna, who holds that animals are essentially characterized by sense-perception:

T16: ALBERT, *De praed.*, IV.7, p. 95.33-36:

« *Amplius ad hoc idem facit quod sensus fit cum sensato sive eo quod habet sensum — hoc enim sensatum dicimus —; simul enim fit animal cum sensu, quia propter sensum dicitur et est animal, ut dicit AVICENNA* ».

According to Grignaschi, this passage would have a 'literal' correspondence in the *Categories* of the *Šifā'*: in particular, it would be related to *Maqūlāt*, IV.4, a chapter devoted to the properties of relatives and notably their simultaneity⁸⁸. In this chapter, Avicenna in fact discusses Aristotle's doubt, and reflects over the status of knowable and knowledge, sensible and sensation. However, in the passage suggested by Grignaschi Avicenna, though making the same point as Aristotle's, does not mention animals as an example of perceptible beings:

T17: AVICENNA, *Maqūlāt*, IV.4, p. 151.6-9:

« The state of this sensation is conceived similarly, for⁸⁹ its essence does not separate from a relation being attributed to it, while the essence of the sensible does separate [from it]; nor it is necessary that [the sensible] be not existent when⁹⁰ the sense is not existent; for it is possible that a certain sensitive being be not existent, while the sensible elements which are principles of the generation of animals, and the other terrestrial bodies, are existent ».

Though for sure thematically related to **T16**, this passage does not exactly point to the doctrine mentioned by Albert, which rather involves that 'animal' is said to be such *because* of its being endowed with sensation. The source could be, according to Janssens and the critical editors, a passage from *Ilāhiyyāt*, V.7 (V.5 in the Latin translation), where 'sense' is assumed by Avicenna to take part in the definition of 'animal' not as a specific difference, but as a 'sign' of the difference (*dalīl 'alā l-faṣl, consignificans differentiam*), which implies that 'sense' takes part

⁸⁶ ARIST., *Cat.*, 7b15-8a12.

⁸⁷ ARIST., *Cat.*, 8a7-8 (« *Simul enim animal fit et sensus* », in Boethius' translation).

⁸⁸ GRIGNASCHI, *Les traductions latines cit.*, p. 73.

⁸⁹ Reading *fa-inna* instead of *wa-anna* (Cairo) with most manuscripts. This is also the reading adopted by Grignaschi (*Les traductions latines cit.*, p. 73 n. 47).

⁹⁰ Reading *mawǧūdan ḥīna* (Cairo) instead of *mawǧūdun āḥarun* [sic] 'in (Grignaschi, *ibid.*).

— at least indirectly — in the essence of ‘animal’⁹¹. Nonetheless, I think that the source is rather to be searched in Avicenna’s *Book of the Soul*, for instance in the very *incipit* of chapter II.3, devoted to the sense of touch, which is presented by Avicenna as « *primus sensuum propter quos animal est animal* » (*awwalu l-ḥawāssi lladī yaṣīru bihī l-ḥayawānu ḥayawānan*)⁹². The meaning is slightly different, since Avicenna is not defining ‘animal’ by means of sense, but is discussing the sense-perceptions that are necessary for an animal to be such (those that characterize the ‘animal soul’, *nafs ḥayawāniyya*, rendered in Latin as *anima sensibilis* or *vitalis*); however, the wording is identical. Once again, then, it is not necessary to recur to the *Maqūlāt* to explain this quotation.

5. MOTION

Besides highlighting Albert’s dialectical use of quotations, in section 4.1 above, I also suggested that his apparent distortions of Avicenna’s doctrines might be a signal of an attempt to reconstruct *ex post* Avicenna’s doctrine, on the basis of other texts. Another, indirect sign of this tendency could be represented by Albert’s numerous references to works by Avicenna belonging to domains other than logic, for instance natural philosophy and metaphysics: as the table in the Appendix shows, these latter quotations represent the majority over the fewer certain references to logic. It looks as if Albert needed to refer to further texts of Avicenna in order to fill a theoretical gap, left open by the unavailability of a Latin translation of the *Maqūlāt*, as well as of most of the logic of the *Šifā’*. The last case I will present now is a further attestation of this trend: a quotation (not analysed by Grignaschi) which offers another example of both Albert’s use of Avicenna’s non-logical works and, at the same time, of his apparent distance from Avicenna’s exegesis.

The case is that of motion, tackled by Albert in *De praed.*, VII.14-15. After having dealt with opposites and opposition, in VII.14 Albert introduces his paraphrase of the short Aristotelian chapter on motion (*Cat.*, 14)⁹³ by means of a distinction between two sorts of being: stable being (*esse stans*) and flowing being (*esse fluens*). According to Albert, after discussing the meanings of stable being (classified in categories), Aristotle would have devoted a section to flowing being, namely motion: the reason for this separate treatment would lie in the fact that, ‘as Avicenna argues’, flowing being may not be ordered as the other genera:

⁹¹ JANSENS, *Albert le Grand et sa connaissance* cit., p. 248; the passage in question is *Ilāhiyyāt*, V.7, p. 237.5-6 (AVICENNA LATINUS, *Philosophia prima*, V.5, p. 266.91-92).

⁹² AVIC., *Nafs*, II.3, p. 58.1; AVICENNA LATINUS, *Liber sextus de naturalibus*, II.3, p. 130.82.

⁹³ ARIST., *Cat.*, 15a13-b16.

T18: ALBERT, *De praed.*, VII.14, p. 167.15-27:

« Est autem, ut AVICENNA dicit, esse fluens, quod non est simplex actus sed permixtus potentiae, qui modus significandi esse et praedicandi ordinatione generum et specierum et individuorum determinari non potuit, eo quod omnia illa significant et praedicant, quod simpliciter suo modo actu est. Propter quod oportuit, ut hoc esse sic designatum et praedicatum in aliquo post praedicamenta consequente significaretur. Et hoc est in tot praedicamentis quot sunt, quae possunt habere res suas et esse, quod praedicant, permixtum potentiae. De hoc ergo tractantes tractabimus de motu, quantum pertinet ad praesentem speculationem; subtiliter enim de motu ad physicum tractare pertinet ».

The source of this quotation is, most probably, the *Physics* of the *Šifā*: this reference to ‘flowing being’, recalls the way Albert interprets Avicenna’s position on the categorial status of motion, according to his peculiar reading of *Samā* ‘*ṭabī*’, II.2⁹⁴. In this part of the *Šifā*, Avicenna actually holds, in fact, that motion is substantially coincident with the category of passion, and seems to dismiss the idea — held by some of his predecessors — that motion is a sort of ‘flowing being’⁹⁵. By contrast, in the corresponding section of Avicenna’s *Maqūlāt* (chapter VII.4) there is not such an ontological consideration of motion, and one finds an explanation for its mention in the *Categories* different from its coincidence with passion. According to Avicenna, ‘motion’ and the other expressions dealt with in the *post-paedicamenta* (‘prior and posterior’, ‘opposite’, ‘simultaneous’) are somehow used by Aristotle in explaining the categories: unlike ‘homonyms’, ‘synonyms’ and ‘paronyms’ (uncommon terms whose technical meaning had to be explained before the treatment of the categories), these other expressions have a common usage which already helps the student’s understanding: thus, the discussion of their commonly accepted meanings is postponed to the last part of the treatise, as a sort of refinement or ‘revision’ (*ta* ‘*qīb*’) of the analysis⁹⁶. Even **T18**, then, might be a witness of Albert’s tendency to use sources other than the *Maqūlāt* to ‘reconstruct’, in a distorted way, Avicenna’s position.

⁹⁴ For an analysis of Albert’s reading of Avicenna, see A. HASNAWI, *Le statut catégorial du mouvement chez Avicenne: contexte grec et postérité médiévale latine*, in R. MORELON, A. HASNAWI eds., *De Zénon d’Élée à Poincaré. Recueil d’études en hommage à Roshdi Rashed*, Peeters, Louvain - Paris 2004, pp. 607-622.

⁹⁵ HASNAWI, *Le statut catégorial du mouvement* cit., p. 613; *Samā* ‘*ṭabī*’, II.2, p. 97.13.

⁹⁶ AVIC., *Maqūlāt*, VII.4, p. 273.9-14.

FINAL REMARKS

A closer inspection of these quotations does not allow us to give a conclusive answer regarding Albert the Great's reception of the Avicennan *Categories*. However, I think that we may substantially agree with Janssens in deeming it unlikely that Albert had access to a full Latin translation of *Maqūlāt*: many quotations of Grignaschi's *dossier* certainly (or almost certainly) rely on other works, while Grignaschi's hypothesis seems definitely viable in one case only (the relativity of contraries and the doctrine of *comparationis forma*, alluded to by Albert in texts T8 and T11). I leave of course the possibility open that, in the relevant case, the source might be an Avicennan or Latin text which escaped my attention. If it is not so, however, Albert might either have combined — as I suggested above — certain passages of Avicenna's *Philosophia prima* in order to formulate the doctrine that he ascribes to Avicenna, or rather he might have found traces of Avicenna's doctrine in *Maqūlāt* in such a work as an anthology (as Janssens suggests). Whereas there existed a widespread Latin literature of *florilegia*⁹⁷, there are comparable cases of anthological commentaries in the Arabic tradition as well, such as — for instance — the commentary on the *Categories* attributed to the philosopher 'Abdallāh al-Dahābī⁹⁸; or short, fragmentary translations of different works such as the *Nota ex logica Alfarabii quaedam sumpta*⁹⁹. It is not unlikely, among all possibilities, that Albert might have had access — directly or indirectly — to a similar collection of Avicennan excerpts.

Besides the material I presented, I believe there are further reasons to reject the possibility of a direct knowledge, on Albert's part, of a translation of Avicenna's *Maqūlāt*. First, as the typology of the other Avicennan quotations shows (see the Appendix), and the typology of Averroes' quotations by Albert confirms, the influence of Arabic philosophers in the *De praedicamentis* seems to be mostly unrelated to logic: the majority of nominal mentions concerns physical and metaphysical topics; Avicenna rarely seems to intervene directly in the shaping of Albert's doctrine of the *Categories*, at least not as he does in Albert's commentary on the *Isagoge*, which instead draws quite heavily on the *Madḥal* of Avicenna's *Šifā'*¹⁰⁰. Second, I believe that, had Albert known at least some of Avicenna's most radical doctrines in the *Maqūlāt* by means of a Latin translation,

⁹⁷ An example of Latin philosophical *florilegium* has been edited in J. HAMESSE, *Les Auctoritates Aristotelis. Un florilège médiéval*, Publications Universitaires, Louvain-la-Neuve 1974.

⁹⁸ Partially edited in M. TÜRKER, *El-Âmirî ve Kategoriler'in şehrleriyle ilgili parçalar*, « Araştırma », 3, 1965, pp. 65-122.

⁹⁹ See above, *Status quaestionis*, note 3.

¹⁰⁰ In Albert's *De quinque universalibus*, Avicenna's *Logica* is quoted no less than fifty times (see ALB., *De quinque universalibus, Auctores ab Alberto ipso allegati*, p. 150).

he would have very likely been influenced by them, or at least prompted to some sort of reaction. Provided that Albert does not hesitate to be critical towards Avicenna in other Aristotelian commentaries (such as that on the *Metaphysics*) when necessary¹⁰¹, such issues as Avicenna's strongly ontological interpretation of the *Categories*, as well as their alleged uselessness with respect to the discipline of logic — just to mention two pivotal and originally Avicennan standpoints of the *Maqūlāt* — would probably have been an object of discussion on Albert's part¹⁰². Moreover, although the influence of Avicenna on other Latin works on the *Categories* still needs to be investigated more in detail, the explicit mentions found in other prominent commentaries, such as those by Johannes Pagus, Peter of Auvergne and John Duns Scotus, only offer either references from indirect sources (this is the case of Averroes' commentary on the *Metaphysics* in Peter of Auvergne), or recognizable references to works translated into Latin, such as the *Canon of Medicine* (Johannes Pagus¹⁰³) or the *Philosophia prima* (John Duns Scotus¹⁰⁴). A further investigation of the other commentaries will surely shed more light on the — arguably indirect — knowledge of Avicenna's *Maqūlāt* in Latin philosophy.

¹⁰¹ See BERTOLACCI, *Subtilius speculando* cit., pp. 272-286. Bertolacci shows that in Albert's Commentary on the *Metaphysics* explicit critical references to Avicenna's doctrines are mixed with implicit consensual recourse to texts of the *Philosophia prima*.

¹⁰² For Avicenna's ontological interpretation of the *Categories* see D. GUTAS, *Avicenna and the Aristotelian Tradition. An Introduction to Reading Avicenna's Philosophical Works*, Brill, Leiden - Boston 2014, pp. 300-303. This very point has also been made by B. Tremblay (*Albertus Magnus: On the Subject of Aristotle's Categories* cit., p. 97).

¹⁰³ JOHANNES PAGUS, *Rationes super Praedicamenta Aristotelis*, p. 228.6 (ed. HANSEN, *John Pagus on Aristotle's Categories* cit.).

¹⁰⁴ DUNS SCOTUS, *Quaest. super Praed.*, p. 4.13-14 (edd. R. ANDREWS, G. ETZKORN, G. GÁL, R. GREEN, T. NOONE, R. WOOD, B. Ioannis Duns Scoti. *Quaestiones in Librum Porphyrii Isagoge; Quaestiones super Praedicamenta Aristotelis*, Opera Philosophica 1, The Franciscan Institute Press, St. Bonaventure, N.Y. 1999).

APPENDIX

Avicenna's quotations in Albert's *De praedicamentis*: an overview

(Lines in gray correspond to the quotations of Grignaschi's *dossier*; square brackets in the last column indicate uncertain sources)

Quotation	Context	Theme	Source
[1] I.3, p. 9.14	Exegesis	Logic	<i>Logica</i>
[2] I.3, p. 10.19	Exegesis	Logic	ALGAZEL, <i>Logica</i>
[3] I.4, p. 11.20	Exegesis	Psychology	[<i>De anima</i>]
[4] I.6, p. 15.5	Exegesis	Ontology	ALGAZEL, <i>Logica</i>
[5] II.1, p. 21.60	Digression	Ontology	<i>Philosophia prima</i>
[6] II.3, p. 25.64	Exegesis	Ontology	<i>Philosophia prima</i>
[7] II.8, p. 38.17	<i>Dubitabilia</i>	Logic	<i>Logica</i>
[8] II.10, p. 41.2	Exegesis	Ontology	[<i>Liber primus naturalium</i>]
[9] III.1, p. 50.13	Digression	Physics	<i>Liber primus naturalium</i>
[10] III.7, p. 62.54	<i>Dubitabilia</i>	Physics	<i>Liber primus naturalium</i>
[11] III.11, p. 73.70	Exegesis	Ontology	[<i>Philosophia prima</i>]
[12] III.12, p. 75.64	<i>Dubitabilia</i>	Physics	PS.-AVICENNA, <i>Liber celi et mundi</i> ^a
[13] IV.1, p. 81.5	Digression	Ontology	[<i>Philosophia prima</i>]
[14] IV.1, p. 81.35	Digression	Logic/ontology	[ALGAZEL, <i>Philosophia</i>]
[15] IV.7, p. 95.36	Exegesis	Psychology	<i>De anima</i>
[16-17] VII.9, p. 156.1; 52	Digression	Ontology	<i>Philosophia prima</i> ; <i>Logica</i>
[18] VII.14, p. 167.15	Exegesis	Physics	<i>Liber primus naturalium</i>

^a This is the source proposed by Steel and Donati (see the note ad loc., p. 75), which I find convincing.

ABSTRACT

A Latin Translation? The Reception of Avicenna in Albert the Great's De praedicamentis

This paper presents an analysis of some quotations of Avicenna in Albert the Great's *De praedicamentis*. Many of these quotations have been thought by Mario Grignaschi to prove a direct knowledge, on Albert's part, of the Avicennan *Categories* (the *Maqūlāt* of his *Kitāb al-Šifā'*), a Latin translation of which is neither extant nor attested: Grignaschi presented these conclusions in a 1972 article on the Latin circulation of Arabic logical works, where he also hypothesized Albert's use of other sources apparently unknown to the Latins (al-Fārābī's *Greater commentaries* on the *Organon*, the logical sections of Avicenna's *Šifā'* posterior to the paraphrase of the *Isagoge*). Jules Janssens challenged these conclusions in a recent contribution (2013), arguing that Albert did not necessarily have access to versions of the concerned Arabic texts. The present research is thus aimed at reprising Grignaschi's *dossier* and Janssens' reassessment, in particular as regards Albert's *De praedicamentis* and its relation with Avicenna's *Maqūlāt*: though Janssens' conclusions are substantially confirmed, further elements of discussion are given concerning Albert's sources, his use of the quotations and his understanding of Avicenna's philosophy.

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Avicenna's *Kitāb al-Burhān*, II.7 and its Latin Translation by Gundissalinus: Content and Text*

INTRODUCTION

The relevance of Dominicus Gundissalinus' *De divisione philosophiae* for (i) the development of Western classifications of the sciences in the 12th century, (ii) its significance for the Toledan translation movement, and (iii) its extensive dependence on a broad array of sources, Greek, Latin, Arabic, and Jewish, not only in style and method but also in content, are all well-established facts¹.

Equally uncontroversial is the importance for Gundissalinus' *De divisione philosophiae* of the famous *Summa Avicennae de convenientia et differentia subiectorum*, the Latin translation of chapter II.7 of the *Kitāb al-Burhān* (*Book of Demonstration*) of Avicenna's *Kitāb al-Šifā'*, which Gundissalinus inserts in his own original work as a watershed separating the treatment of the theoretical sciences and that of the practical sciences. The very position of this 'treatise within the treatise' is arguably a culmination of the project and offers a conceptual justification for the classification and analysis of the first part of the *De divisione*. Avicenna's text provides the main theoretical underpinnings for Gundissalinus' own model and classification. As the Arabic title (*fī ḥtilāf al-'ulūm wa-štirākihā bi-qawl mufaṣṣal*)

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¹ On (i) and (iii), see the classic H. HUGONNARD-ROCHE, *La classification des sciences de Gundissalinus et l'influence d'Avicenne*, in J. JOLIVET, R. RASHED eds., *Études sur Avicenne*, Les Belles Lettres, Paris 1984 (Sciences et philosophies arabes. Études et reprises), pp. 41-75; cf. also A. FIDORA, *Domingo Gundisalvo y la teoría de la ciencia árabe-aristotélica*, EUNSA, Pamplona 2009 (Colección de pensamiento medieval y renacentista), pp. 227-243. On (ii), see C. BURNETT, *The Coherence of the Arabic-Latin Translation Program in Toledo in the Twelfth Century*, « Science in Context », 14, 2001, pp. 249-288.

of the original *Burhān* chapter suggests, the text offers a detailed account of the way in which the sciences differ from one another and of the way in which they share in common elements. The text, which is the only part of *Burhān* ever to be translated into Latin, is significant not only for the specific content of the classification(s) it presents and discusses but also, more generally, because it reflects Avicenna's overarching model of the interrelations between the sciences and their ontological justification at the confluence of metaphysics, logic, and epistemology. The basic building blocks of Avicenna's theory of science are put to use here to develop a complex architecture that ultimately rests on essentialist foundations and depends on his account of *per se* predication.

The purpose of this paper is (i) to present and discuss the structure of this synoptic treatment of the architecture of scientific knowledge, which aims to articulate in detail a number of dependence relations among different sciences, and (ii) to discuss a number of textual points, both in Avicenna's Arabic and in Gundissalinus' Latin, with a relevant role for the understanding of major doctrinal points as well as for the potential benefit of future editors of the two texts. The current editions already show how a close analysis of the relation between them can be mutually beneficial for an improved establishment of both, with interesting results that are oftentimes corroborated by independent witnesses not consulted by the editors (Afīfī and Badawī for the two Arabic editions of *Burhān*; and Baur for the edition of Gundissalinus' Latin translation)².

² The two editions of the Arabic text are lacking in several respects. 'Afīfī's is based on only three manuscripts, but in spite of this is still superior in terms of understanding of the text to Badawī's earlier edition, which is based on a slightly larger set (five instead of three, two of which are also used by 'Afīfī). The manuscripts tradition of the *Burhān* has not been the object of a systematic study so far, but it seems clear that the two current editions are not critical in any sense of the term (there is no attempt to establish a *stemma codicum*, the number of witnesses is exceedingly small and arbitrarily chosen, variants are registered only on occasion and not systematically). That being said, the texts are at least a starting point, and an inevitable point of reference to be in dialogue with. For the Arabic text I use Avicenna, *Aṣ-Šifā', al-Manṭiq, al-Burhān*, ed. A. 'AFĪFĪ, *al-Maṭba'a al-amīriyya*, Cairo 1956 [= henceforth *Burhān*]; cf. also ID., *Al-Burhān min Kitāb al-Shifā'*, ed. 'A. BADAWĪ, *Maktabat al-nahḍa al-miṣriyya*, Cairo 1954. For the Latin text, see DOMINICUS GUNDISSALINUS, *De Divisione philosophiae*, ed. L. BAUR, Aschendorff, Münster 1903 (Beiträge zur Geschichte der Philosophie des Mittelalters IV, 2-3). In 2007, Baur's edition of Gundissalinus's *De divisione philosophiae* was reprinted with facing German translation in A. FIDORA, D. WERNER, *Dominicus Gundissalinus: De divisione philosophiae: Lateinisch/Deutsch, Über die Einteilung der Philosophie*, Herder, Freiburg im Breisgau 2007. The latter is not a new critical edition, even though it incorporates some occasional corrections that take into account the Arabic text, which at the time of Baur's edition was still unedited. — Notable witnesses of the Arabic text are ms. Oxford, Bodleian Library, Pococke 121 (602H/1206); ms. Istanbul, Süleymaniye Kütüphanesi, Damad Ibrahim Paşa 822 (6th-7th/12th-13th c.); ms. Cairo, Maktabat al-Azhar, Behīt 331 falsafa (7th/13th c.); ms. Istanbul, Süleymaniye Kütüphanesi, Damad Ibrahim Paşa 824 (834H/1431); ms. Leiden, Golius 84 (881H/1476); ms. Leiden, Golius 4 (before

The first part of the paper is concerned with the philosophical analysis of *Burhān*, II.7 and provides a map for orientation in the chapter. The second part deals with textual issues and offers a set of preliminary remarks aiming to shed light on the transmission of the text and suggest potential emendations, while occasionally addressing Gundissalinus' style of translation or lexical usage. Unless otherwise noted, the Arabic text printed in the second part of the paper is from 'Afifi's edition while the Latin text is from Baur's edition.

I. STRUCTURE OF *BURHĀN*, II.7

If one were to look at Avicenna's chapter in isolation, or just read it in the Latin version inlaid by Gundissalinus in his *De divisione philosophiae*, the text would perhaps give the impression of being a self-contained, standalone exercise of classification. This, however, would betray a misconception of its role in the general economy of *Burhān* and the relation of the latter to the *Posterior Analytics*. Even though the chapter is undoubtedly one of the areas of *Burhān* in which Avicenna most significantly alters the relative distribution of content of *An. Post.*, it fits perfectly in the general Aristotelian scheme and in the organization of that work. It is an expansion on a particularly important point that Avicenna deems it necessary to analyze more in depth. If it breaks the continuity of *An. Post.* it only does so insofar as it develops in a systematic way the transition between chapters A6 and A7, exploring in detail the relations between the Aristotelian complex of ideas around the notion of the subject of a science and that of per se predication, the ban on kind crossing and the explanatory and necessary character of scientific knowledge (two conditions that can only be satisfied if certain constraints on the admissible terms are met)³.

Among Avicenna's most notable accomplishments in *Burhān*, II.7 those that stand out most prominently are: (i) an elaborate account of the various types of relations that may hold between pairs of scientific disciplines; (ii) a

10th/16th c.). For the Latin text of the *Summa* in the *De divisione*, an important witness not used by Baur is ms. Bodleian 679. I am following Jules Janssens (to whom I am grateful for generously sharing with me digital images of the chapter) in using this manuscript to verify the plausibility of some of the hypotheses below. This article, as will become clear in the second section, is very much indebted to J. JANSSENS, *Le De divisione philosophiae de Gundissalinus: quelques remarques préliminaires à une édition critique*, in E. CODA, C. MARTINI BONADEO eds., *De l'Antiquité tardive au Moyen Âge. Études de logique aristotélicienne et de philosophie grecque, syriaque, arabe et latine offertes à Henri Hugonnard-Roche*, Vrin, Paris 2014 (Études Musulmanes vol. 44), pp. 559-570.

³ Avicenna's interpretation of this network of Aristotelian notions is discussed in its philosophical significance in R. STROBINO, *Per se, Inseparability, Containment, and Implication: Bridging the Gap between Avicenna's Theory of Demonstration and Logic of the Predicables*, « Oriens », 44, 2016, pp. 181-266.

theoretical justification of those relations, ultimately ontological in character, based on hierarchical relations between subjects or their attributes; and (iii) an identification of different kinds of subordination. In the following I will trace each of them to different sections of chapter.

A map of Burhān, II.7

Depending on the focus of one's analysis, different divisions of the text could be offered. For our purposes, and with a view to highlighting the classificatory aspects of Avicenna's discussion, the chapter naturally divides into two main parts: (I) the first focusing primarily on how sciences differ from one another (*iḥtilāf, diversitas*), (II) the second on how sciences may share in various elements (*iştirāk, communicatio*)⁴.

(I) In the first part, Avicenna presents his fundamental classification of types of relations between different sciences based on the corresponding relations between the underlying subjects⁵. At the root of the division is a distinction between sciences that differ because [a] they have two distinct subjects or [b] because they treat one and the same subject in different ways. Section [a] contains the bulk of the text, devoted as it is to a full articulation of the primary divisions of scientific domains and to an analysis and categorization of the fundamental scientific disciplines and of their interrelations⁶.

(II) The second part offers a complementary classification of the criteria of identity and distinctness for the sciences focusing on the ways in which sciences may have elements in common. It addresses the question from a different perspective — that of the canonical three elements of an Aristotelian science —, including not only the subjects, but also scientific principles and questions, i.e., the conclusions of scientific syllogisms (the theorems of a science). This second classification confirms (almost without exception) the taxonomy presented in the first part, and constitutes a digest of the results of the chapter summarizing

⁴ The first part is by far the most extensive. It occupies almost ninety percent of the text and includes a digression on the status of metaphysics (first philosophy) with respect to the other sciences, its necessity, and its difference from dialectic and sophistics in subject, principles, and goals.

⁵ The ontological underpinnings of Avicenna's ideas on distinctness, overlap, and subordination are treated systematically in STROBINO, *Per se, Inseparability, Containment, and Implication* cit.

⁶ In this framework, a large subsection [see *abab* in the outline below] addresses the peculiar status of metaphysics with respect to all other sciences. It features as the last point in the discussion of [a] and should accordingly be regarded as an in-depth analysis of a particularly significant case rather than as an independent section.

the basic types of relations that exist between the different sciences and the most representative cases that exemplify them.

In the first part, section [a], Avicenna presents two basic cases: one [aa] in which the subjects of two sciences do not overlap (*min ġayr mudāḥala, absque commixtione*), the other [ab] in which the subjects overlap (*ma'a mudāḥala, cum commixtione*). In the former case, the two sciences are just distinct⁷. The latter case encompasses a number of further sub-divisions that make it the most densely populated in the entire taxonomy. Two subjects may overlap [aba] fully, when one is more general than the other⁸, or [abb] partially, each having something in common with the other as well as something distinct from the other⁹.

When the subject of one science is more general than the subject of the other, this may be, according to Avicenna, in virtue of two fundamentally different types of generality (*'umūm, communicatio*)¹⁰.

The more general subject stands to the less general subject either in a [abaa] genus-like relation or in an [abab] implicate-implicant relation of the kind holding between 'one' and 'being' and every other entity.

The first alternative [abaa] is then further differentiated into cases depending on whether the relation between the more general subject and the less general

⁷ [aa] is exemplified by the relation between arithmetic and geometry, their respective subjects being distinct species of quantity, namely discrete as opposed to continuous quantity (number and extended magnitude).

⁸ I translate the Avicennan term *mudāḥala* (Lat. *commixtio*) as 'overlap', suggesting that the intersection between two subjects is non-empty. I use the non-Avicennan expressions *full* (as opposed to *partial*) overlap to designate the cases in which the subject of one science does not exceed the subject of the other, which according to Avicenna occurs if the former is more general than the latter (in some sense of generality subject to further qualifications). Full overlap does not admit of residue.

⁹ [abb] is exemplified by the relation between medicine and ethics. While medicine is concerned with the investigation of the human body and of its parts (which as we will see is in turn subordinated to physics), ethics investigates the rational soul and its practical faculties.

¹⁰ While *commixtio* is consistently used for *mudāḥala* and is the broadest all-encompassing term, *communicatio* is used here for *'umūm* in the sense of 'generality' in constructions where Avicenna characterizes two different ways in which what is more general (*al-a'amm*, or occasionally just *al-āmm*; cf. *communius, magis commune*) stands to the more specific (*al-aḥaṣṣ, minus commune*). In the second part of the chapter, *communicare* and derivatives are also used to translate the Arabic *iṣṭaraka*. At first sight, one would think that the original term for *'umūm* might have been *communitas* — a translation attested in the *Metaphysics* —, but the consistent use of *communicatio/communicat* in the lines that follow suggests that this is the correct reading, even if we have to assume that the term is being used in the unusual sense of 'generality' or 'commonness' to reflect what the Arabic means in the present context (see textual point (3.3) in the second part of the paper).

subject [*abaaa*] is a real genus-species relation¹¹ or [*abaab*] involves a range of possibilities in which the more general term is related to the less general term in the way a genus is related to an accident of a species. [*abaab*] encompasses one last range of nuances that Avicenna uses to characterize four different types of subordination not involving parthood and distinct from the implicate-implicant subordination singled out above¹². It is in the case of full overlap between subjects that we encounter the most significant theoretical distinctions in Avicenna's first classificatory effort, particularly the one between 'being part' and 'being under'¹³.

The differentiation of case [*abaa*] is due to the need of accounting for two different ways in which a more general subject can be narrowed down to determine the subject of a hierarchically lower science. The most obvious case is when we simply take a differentia and divide the genus (the more general subject) to obtain a species (the less general subject). In this case – and only in this case – the lower science is said to be *part* of the higher science, i.e., when the two subjects stand in a real genus-species relation.

If [*abaaa*] is a straightforward, useful relation to characterize the internal division of a science in its sub-fields, it fails to capture the complexity of a number of other representative pairs, and especially to account for oblique

¹¹ [*abaaa*] is exemplified by the relation between the study of pyramids (*mahrūtāt*, *pyramides*) as part of the study of solids (*muğassamāt*, *corporea*), and that of solids as part of (a general theory of extended) magnitudes (*maqādir*, *mensurae*), which presumably coincides, in Avicenna's view, with geometry (*handasa*) itself.

¹² The fifth kind of subordination corresponds to [*abab*]. It is not included by Avicenna in the list of four ways in which a subject is said to fall *under* another with respect to the first sense of generality because the ontological relation it captures is different (i.e., not a genus-like relation).

¹³ An issue that lies beyond the scope of this study but is undoubtedly worthy of further investigation is Avicenna's debt towards Fārābī: what matters for our purposes is not so much the celebrated classification of the sciences in the *Iḥṣā' al-'ulūm* (*Enumeration of the sciences*) but rather a tangle of insights from Fārābī's own *Kitāb al-Burhān*, which as I have argued elsewhere, constitutes an unsurprisingly relevant source for Avicenna (STROBINO, *Per se, Inseparability, Containment, and Implication* cit., *passim*). In particular, the relevant distinction, which possibly echoes a subtext already to be found in Aristotle in connection with different forms of dependence, is one between the idea of a science being part of another science (*ğuz'*) and that of a science being merely subordinated to another science (*taḥta*). The two types of dependence embody different ontological relations between their respective subjects. The distinction is articulated *in nuce* in AL-FĀRĀBĪ, ABŪ NAṢR, *Kitāb al-Burhān wa-Kitāb šarā' if al-yaqīn*, edited by M. FAHRI, Dār al-Mašriq, Beirut 1985, IV.1 (*Fī kayfiyyat isti' māl al-barāhīn wa-l-ḥudūd fī ṣ-ṣanā' i' an-naẓariyya*), p. 64. In general, various examples used in *Burhān*, II.7 to illustrate different types of subordination (e.g., geometry and the study of pyramids; geometry and astronomy as the study of moving spheres) as well as the discussion of metaphysics and its relation to dialectic and sophistics all seem to be themes of direct Fārābīan derivation.

relations that cut across praedicamental lines¹⁴. The terrain is rugged and Avicenna's taxonomy aims to reflect this fact.

In this connection, [abaab] specifies a range of ways in which one can move from the more general to the less general by qualifying a subject not through a dividing differentia but rather through different kinds of accidents. Avicenna identifies four paradigmatic types exhibiting a progressively more tenuous ontological connection with the more general subject. The latter may be restricted (or 'made less general'; *muḥaṣṣaṣ*, *proprium*; *aḥṣaṣ*, *minus commune*)¹⁵ by adding to it one of the following qualifying properties: (i) a *per se* accident; (ii) a foreign non-*per se* accident which is a disposition in the subject itself and not a mere relation; (iii) a foreign non-*per se* accident which is not a disposition in the subject itself but rather a mere relation; (iv) a foreign non-*per se* accident of a species of a different subject¹⁶.

(i) is exemplified by the relation between physics and medicine: medicine is subordinated to physics because it investigates the subject of the part of physics that deals with the human body, insofar as the latter is qualified by *health* and *sickness*, which are two *per se* accidents of the human body.

(ii) is the case of geometry and astronomy: part of geometry is concerned with spheres (a species of solid), while astronomy deals with moving spheres, i.e., with spheres qualified by a certain property. The property in question is a foreign non-*per se* accident of the subject (in the technical sense of *Burhān*). The subject of astronomy (the study of moving spheres) is less general than the subject of geometry (even of the part of geometry that specifically deals with spheres) and hence the former science is subordinated to the latter. Astronomy is concerned with moving spheres as geometrical objects and with their geometrical relations, i.e., with moving spheres insofar as they are *spheres*, rather than insofar as they are characterized by motion¹⁷.

¹⁴ Avicenna is not committed to a violation of the Aristotelian ban on kind crossing. To the contrary, the complex machinery he sets up is precisely intended to preserve that principle and to specify the limits of its application in order to account for the phenomenon of subordination.

¹⁵ In this context, *ḥ-ṣ-ṣ* and derivatives, unless otherwise noted, do not have the technical meaning of *proprium* as one of the five predicables from the *Isagoge*.

¹⁶ In connection with this distinction, I shall leave aside the question of determining exactly the status of *hay'a*, which I generically translate as 'disposition' for want of a better term and to reflect as closely as possible the Latin use of *dispositio*. What is clear is that Avicenna is keen to distinguish between (ii) and (iii) and that (iii) represents a kind of connection with the more general subject weaker than (ii).

¹⁷ Avicenna returns on this point after presenting (iv) in order to clarify in what sense it differs from (ii) and also below in discussing [bb], namely the case of two sciences having the same subject but being distinct because one science treats the subject in one way, the other science in another way. In that context he explicitly claims that if this were not the case, astronomy would be subordinated to physics and not to geometry, reinforcing the point made here.

(iii) illustrates the kind of subordination holding between optics and geometry. In this case, the foreign non-*per se* accident attached to and qualifying the subject of the more general science (geometry and in particular the part of geometry dealing with lines) is the relation of lines to the eye and vision in general. For this reason optics cannot be a part of geometry, because it is concerned with lines as they relate to vision, but it is subordinated to geometry because it deals with properties and relations that fall within that discipline.

(iv) is the most complex case, where the qualifying accident is an accident of a species of a different subject (i.e., not of the subject of the superordinate science). Avicenna needs this relation in order to explain the ambivalent status of music, which on the one hand deals with 'objects' (notes) that are physical entities (sounds), but is concerned with them only insofar as an extrinsic set of features, i.e., certain numerical ratios, attach to them. Thus, the subject of music, which in and of itself is a species of the subject of physics, is qualified through an extrinsic accident and is investigated under that respect. For this reason, as noted above, music is not genuinely subordinated to physics but rather to another science, i.e., arithmetic, whose subject covers the foreign accident through which the subject of music is qualified. I refer to the discussion in the second section of the paper for a better appreciation of this point, but in presenting (iv), Avicenna explicitly argues that if we were to investigate the subject of music in itself rather than insofar as it is qualified by number, then music would be a part of physics (not even merely subordinated to it because we would be investigating a particular kind of physical entity).

Lest confusion arise as a result of the above association of accidents and subjects of a science, it should be kept in mind that the accidents called into play in (i)-(iv), be they *per se* or foreign, are qualifications determining the subject of the subordinate science. These are distinct from the characteristic *per se* accidents that, by Avicenna's own explicit, unsurprising admission, each science investigates in order to establish their holding of those subjects¹⁸.

A summary of the differences between these four cases may help attenuate the potential impression of ad-hoc-ness of Avicenna's theoretical construction. The difference between (i) and (ii)-(iv) is straightforward: the first case is the only one in which the qualifying accident is a *per se* accident of the subject of the more general science; in the remaining three cases, the accident is foreign

¹⁸ Thus, medicine seeks to establish the *per se* accidents of the human body insofar as it healthy or sick; astronomy the *per se* accidents of moving spheres *qua* spheres; optics the *per se* accidents of visual lines *qua* lines; and music the *per se* accidents of notes, i.e., consonance and dissonance (Ar. *ittifāq/iḥtilāf*; Lat. *convenientia/diversitas*).

non-*per se*, and in (iv) as opposed to (ii)-(iii) it is not a foreign accident directly attaching to the subject of the more general science. The difference between (ii) and (iii) lies in the weaker connection between the accident and the subject: in one case the accident is something that occurs to the subject not in a merely relational sense, while in the other case Avicenna seems to think that the connection is purely relational (the moving spheres are moving objects, while the consideration of lines insofar as they relate to vision is somehow just a matter of investigating them under a certain respect, not in connection with some property that actually inheres in them).

Two further differences are explicitly addressed by Avicenna. First, cases (i)-(iii) differ from case (iv) in that in the former the subject of the more general science is always predicated of the subject of the less general science (because the subject of the less general science is nothing other than the subject of the more general science plus a qualification which directly determines it): thus, trivially, human bodies insofar as they are sick or healthy are (human) bodies; moving spheres are spheres; and visual lines are lines. Not so in the case of arithmetic and music, because notes are not numbers or numerical ratios. Secondly, (ii) and (iv) represent two genuinely distinct cases because in (ii) the relation of subordination obtains with respect to the subject (moving *spheres*) while in (iv) it obtains with respect to the qualifying accident (notes characterized by *numerical relations*)¹⁹.

Resuming the division, case [aba] in which the subject of one science is more general than the subject of the other science has two main divisions depending on the kind of generality at stake. After discussing in detail what I have called the genus-like type, Avicenna moves on to the second type, whose treatment had been explicitly deferred at the beginning of the chapter to a later stage of the analysis.

The second type of generality (*'umūm*) is the one connecting an implicate (*lāzim*)²⁰ and that of which the implicate is an implicate, and more specifically corresponds to the relation holding between the notions of 'one' and 'being' and everything else. I shall not cover this case in detail here because the relevant issues are discussed in the second part of the paper. Suffice it to say that

¹⁹ In (ii) the science of moving spheres is subordinated to the science of spheres, not to the science of the accident that qualifies the spheres (motion), while in (iv) music is subordinated to the science that treats the accident (arithmetic), not to the science (physics) of that which is qualified by it (notes as specific types of sounds). On the relation between note, sound, and number see also Avicenna's *Kitāb al-mūsīqā*, where the necessary background is discussed more extensively and the brief references in *Burhān*, II.7 are corroborated by independent evidence.

²⁰ It will be useful to note that the traditional term used to translate *lāzim* in Latin is *concomitans* or simply *comitans*. I will return to the point below to mention a textual issue already identified by JANSSENS, *Le De divisione philosophiae de Gundissalinus* cit., p. 563.

Avicenna introduces this category to serve an important purpose, namely to accommodate the case of metaphysics (or first philosophy) and its relation to all other sciences.

In this context, Avicenna does three things. First, he cursorily lists various features that characterize the status of metaphysics with respect to the other sciences, most notably the fact that the other sciences are all subordinated to metaphysics but not part of it and that no subject is more general than the subject of metaphysics. Secondly, he gives a brief argument for the necessity of a science that is more general than all other sciences, such that the principles of the latter are certified in the former, and argues for the conditional character of the principles of all subordinate sciences²¹. Thirdly, he explains in what ways two disciplines such as dialectic and sophistics, which might potentially claim a similar status because of their wide scope of application, fail to meet the standards of metaphysics. The three disciplines differ with respect to their subject, principles, and goals²².

The first part of *Burhān*, II.7, after the extensive analysis of [a] the ways in which sciences differ when their subjects are distinct, concludes the classification with the other horn of the initial division, devoted to [b] the way in which sciences differ when their subject is one and the same (*iḥtilāf al-‘ulūm al-muttafiqa fi l-mawḍū’*). Avicenna argues that this may occur in two ways. In the first case [ba] one science investigates the subject without qualification and the other under a particular respect. In the second case [bb] both treat their common subject under different respects. The division serves the major purpose of enabling Avicenna to account for the difference between two significant pairs: the relation between medicine and physics on the one hand, and that between astronomy and physics on the other. As noted above, the subject of medicine may seem to coincide with the subject of a particular branch of physics dealing with the human body²³. But according to Avicenna, medicine treats the human body as qualified by the *per se* accidents of health and sickness, which is an altogether different endeavor from investigating the properties of the human body as such, i.e., without qualification. The latter is the prerogative of (a part of) physics.

²¹ By conditional character Avicenna means that the logical form of each principle in a science other than metaphysics should be that of a conditional statement — ‘hypothetical conditional’ (*ṣarṭi muttaṣil*) in his technical terminology) — whose antecedent is proven in metaphysics. Some such principles have typically the form of statements in which the antecedent purports to establish the existence of a subject, e.g., if there are such-and-such physical entities, then *p*, where *p* is a theorem of physics in which a *per se* accident of the subject is proven to hold of the subject itself.

²² See A. BERTOLACCI, *The Reception of Aristotle’s Metaphysics in Avicenna’s Kitāb al-Šifā’*, Brill, Leiden 2006, pp. 267 and 233-234.

²³ Medicine and physics were used to illustrate the first type of subordination (i) discussed above.

The other case offers an opportunity to expand on the relation of subordination between astronomy and geometry and to clarify why the former falls under the latter and not under physics. For it may seem natural to assume that astronomy and a certain branch of physics (corresponding to the *De caelo*) have one and the same subject, namely the spherical shape of the universe. Yet, according to Avicenna the two sciences investigate this subject in different respects. Astronomy insofar as it is a spherical object and with respect to quantity (which is why it is subordinated to geometry), physics insofar as it has a peculiar principle of motion²⁴. The subject of astronomy is the spherical body of the universe insofar as it has quantity, and astronomy as a science investigates the properties that necessarily follow from it in this respect; the subject of (the relevant part of) physics is the spherical body of the universe insofar as it has a particular kind of motion, and physics as a science investigates the properties that necessarily follow from it in this other respect. The two sciences approach the sphericity of the universe from distinct perspectives. In one case as a result of the impossibility of it having another shape because of the particular kind of motion that characterizes it; in the other case for its purely geometrical properties.

The second part of *Burhān*, II.7, which corresponds to about a tenth of the whole chapter, summarizes the results of the elaborate division carried out in the first part but from a complementary perspective. To conclude his analysis of the possible relations between different sciences, Avicenna introduces a second, independent taxonomy driven by the idea of establishing how different sciences relate to one another with respect to the three elements that typically define the perimeter of (Aristotelian) scientific disciplines: (1) principles, (2) subjects, and (3) scientific questions (the theorems of a science in which salient properties, or accidents *per se* of the subject, are demonstratively proven to hold of the subject)²⁵.

The first criterion encompasses three main cases, excluding the trivial case of common axioms (such as the principle that when equals are subtracted from equals, the remainders are equal)²⁶. Two sciences may be related to each other with respect to principles in such a way that the shared²⁷ principles [1.1] are of

²⁴ Astronomy deals with the moving spheres insofar as they are spheres and not insofar as they are in motion, i.e., not with respect to the principle of their motion.

²⁵ In order to avoid confusion, I use Roman numerals to label the elements of the second classification (as opposed to lowercase letters for the elements of the first classification). Notwithstanding the cost of an apparently unnecessary proliferation of tags, this approach should make it easier to see more clearly and immediately the parallels between the two taxonomies.

²⁶ The principle is in fact common not to all sciences but more appropriately to those that deal with quantity. I return on this point in the second part of the paper, text 18.

²⁷ The abstract term for sharing in (principles, subjects or questions) in this section is *šarika* (cf. Latin *communicatio*). This notion should be kept distinct from that of *'umūm* (also *communicatio*) discussed above.

the same rank²⁸, [1.2] in one science the principles are prior and in the other posterior, or [1.3] what is a principle in one science is a scientific question (a theorem) in the other science. The last case is subject to a further subdivision. When one and the same statement is a principle in one science and a question in another science, Avicenna distinguishes between [1.3.1] the case in which the two sciences are different because the subject of one is more general than the subject of the other, and [1.3.2] the case in which the two sciences are different without the subject of one being more general than the subject of the other.

When one of the two subjects is more general and the other less general, one and the same claim may be either [1.3.1.1] a scientific question proven in the more general, superordinate science and a principle assumed in the less general, subordinate science or [1.3.1.2] a scientific question proven in the latter and assumed in the former²⁹. These two sub-cases account, according to Avicenna, for a distinction between what is a real principle (*mabda' ḥaqīqī, principium verum*) and what is only a principle according to us (*mabda' bi-l-qiyās ilaynā*).

[1.1] and [1.3.2] are interestingly illustrated by the same example, namely the case of arithmetic and geometry. It is easy to see the reason for [1.1], which corresponds to [aa] in the first classification. There is no overlap in subject between arithmetic and geometry, and their principles are in a sense at the same level because they deal with different kinds of quantities.

In light of this, however, the case of [1.3.2] seems to become problematic because it covers situations in which certain claims are principles in one science and questions in another in spite of there not being a hierarchical ranking between those sciences. This is compatible with the characteristic trait of [1.1] (the principles being of one and the same rank) but still leaves a problem unsolved, namely how something can be genuinely subject to proof in one science and assumed in another science, without there being a hierarchical arrangement of any sort between the sciences in question.

The example offered by Avicenna to illustrate this horn of the division may be the very reason he feels pressured to introduce it in the first place, namely in order to find room in his taxonomy for the use, in the tenth book of Euclid's *Elements*, of arithmetic theorems (proven in some of the earlier books, presumably *Elements* VII-IX)³⁰ as principles for geometry theorems³¹.

²⁸ The Arabic expression '*alā martaba wāḥida*' captures the idea that the principles of two sciences are on a par with each other as opposed to being ranked according to priority and posteriority.

²⁹ The distinction between more general (*a' amm*) and more proper/less general (*aḥaṣṣ*) subjects that was extensively used in the first part is paralleled here by a distinction between higher (*a' lā, altior*) and lower (*asfāl, inferior*) sciences.

³⁰ Avicenna collectively refers to them as the treatises on number (Ar. *fī l-maqālāt al-'adadiyya*; Lat. *in libro de numero*).

³¹ The problem is that in [aa] Avicenna seems to deny that there is any overlap between the subjects of arithmetic and geometry while [1.3.2] concludes with the claim that the use of

[1.2] is exemplified by the case of geometry and optics as well as by that of arithmetic and music. The use of these two examples is unsurprisingly compatible with the first classification, given that they are both sub-cases of subordination without parthood (corresponding to [abaab (iii)] and [abaab (iv)] above), in spite of the fact that in the first classification Avicenna treats the two pairs separately as a result of a more fine-grained distinction between the types of subjects involved.

The second criterion, namely commonness of questions, is only briefly mentioned in order to specify a necessary condition, namely that there be a shared predicate which is demonstratively proven to hold of the subject of the sciences under consideration. When this is the case, however, a deeper connection must be in place, because two sciences could not be such that one and the same property is predicated of their subjects unless those subjects are identical or overlap in one of the ways outlined above. If the two subjects were entirely distinct, there could be no sharing of predicates of scientific questions in the first place.

This brings Avicenna to the third and most important criterion, namely the sharing of subjects, which concludes the second classification and the chapter as a whole.

It is worth quoting the phrase with which Avicenna introduces the last member of the division: « the primary and most fundamental [kind of] sharing is the sharing of the subject in one of the three aforementioned ways » (Ar. *aš-šarika al-awwaliyya al-ašliyya* [...] *huwa š-šarika fī l-mawḏū* 'alā waḡh min al-wuḡūh al-maḏkūra; Lat. *communicatio igitur prima et radicabilis* [...] *est communicatio in subiecto secundum aliquem modorum qui predicti sunt*).

The various divisions laid out in the first classification are grouped by Avicenna in the second classification under three basic headings. Two sciences may have something in common, as far as their subjects are concerned, either because [3.1] the subject of one science is more general than the subject of the other, because [3.2] the two subjects partially overlap, or because [3.3] one and the same subject is addressed by one science in one respect and by the other science in another respect. Each of these three types contains or coincides with one of the cases presented in the first classification, as is confirmed by the various pairs advocated by Avicenna as illustrations of this second division.

[3.1] corresponds to the largest group in the first list, namely [aba], which covered the two ways in which sciences are related when the subject of one is more general than the subject of the other (the genus-like relation and the implicant-implicate relation for the case of 'one' and 'being'). Avicenna interestingly uses two complementary pairs as examples to illustrate the two basic cases of hierarchical

arithmetical theorems as geometrical principles « is not possible if there is no sharing of (i) a subject or (ii) the genus of a subject ». (i) would be in tension with the previous claim, while (ii) would seem to recast the relation in rather different terms, i.e., with respect to a *third* more general science dealing with quantity as such.

dependence discussed in the first part of the chapter, namely parthood and subordination (without parthood). The choice of two distinct pairs — geometry and the study of pyramids on the one hand, physics and medicine on the other (see [abaaa] and [abaab (i)] above) — as representative examples of the corresponding relations of ‘being part’ and ‘being under’ can hardly be coincidental. In fact, both examples fall within the internal subdivision of the first type of ‘*umūm*’ (the genus-like relation) but, as noted above, the case of subordination without parthood also applies to the second kind of ‘*umūm*’, i.e., the relation of all other sciences to metaphysics: the latter is therefore also captured by [3.1].

[3.2] coincides with [abb], namely with the case of partial overlap between the subjects of two sciences, and is exemplified, as above, by the relation between medicine and ethics, each of which has something in common with the other and something proper to itself³².

Thus, [3.1] and [3.2] jointly exhaust [ab] the case of overlap between subjects. [aa], the case of non-overlap (exemplified in the first classification by the relation of arithmetic and geometry), is not discussed in the second classification (in connection with the subject) because what is at stake here are cases in which something is shared, and trivially nothing is shared with respect to the subject when there is no overlap (Ar. *mudāḥala*; Lat. *communicatio*) between subjects³³. But [aa]-[ab] jointly account for all possible ways in which sciences may [a] differ with respect to multiple subjects.

What remains to be determined is therefore whether something in the second classification corresponds to [b], namely the case of sciences differing with respect to one and the same subject.

This task is accomplished by [3.3] which covers circumstances in which the subject is one and the same but is investigated under different respects by different sciences, as is the case in astronomy and physics. The example corresponds in fact to [bb], one of the two sub-cases discussed by Avicenna (the other case, in which one science deals with the subject without qualification and the other with the subject under a particular respect is not mentioned in the second classification, but presumably falls under [3.3] as well).

To summarize the content of the two classifications and, more generally, to provide a map of the chapter, I offer below a schematic reconstruction of its structure³⁴. Assuming that α and β are the subjects of two sciences, the following are all possible relations outlined by Avicenna:

³² See n. 9.

³³ Pending a definitive adjudication of the issue raised in n. 31.

³⁴ The outline follows for the most part the order of the original text with only a few exceptions (e.g., [abb] below, which occurs in the text earlier than the current layout would suggest) due to the need of presenting the division as compellingly as possible. The order can be reconstructed on the basis of the references I provide to both Arabic and Latin text for each individual element in the division and section in the chapter.

[Part I. First classification : difference with respect to subject(s)]³⁵

[a] Difference with respect to multiple subjects³⁶

[aa] α and β do not overlap³⁷

geometry - arithmetic

[ab] α and β overlap³⁸

[aba] α is more general than β ³⁹

[abaa] first type of 'umūm (genus-like relation)⁴⁰

[abaaa] α is a genus and β is a species of α (parthood, *pars*, *ǧuz'*)
(solid) *geometry - study of pyramids*⁴¹

[abaab] α is a genus and β is a species qualified by an accident γ
(subordination, *sub*, *tahta*)⁴²

The qualifying accident may be

(i) an accident *per se* of β

physics - medicine (body - human body insofar as it is *healthy* or *sick*)⁴³

(ii) a foreign non-*per se* accident of β (a disposition of the subject itself, not a purely relational property)

geometry - astronomy (extended magnitude - moving *spheres*)⁴⁴

(iii) a foreign non-*per se* accident of β (not a disposition of the subject itself but a purely relational property)

geometry - optics (extended magnitude - lines insofar as they relate to *vision*)⁴⁵

(iv) a foreign non-*per se* accident of β where the latter is a species of a different subject δ and is investigated only insofar as γ holds of it
arithmetic - music (number - notes as *numerical ratios*)⁴⁶

³⁵ *Burhān*, II.7, pp. 162.1 - 167.10; *De divisione philosophiae*, pp. 124.14 - 132.8.

³⁶ *Burhān*, II.7, pp. 162.2 - 166.15; *De divisione philosophiae*, pp. 124.14 - 131.3.

³⁷ *Burhān*, II.7, p. 162.2-4; *De divisione philosophiae*, p. 124.14-18.

³⁸ *Burhān*, II.7, pp. 162.4 - 166.15; *De divisione philosophiae*, pp. 124.18 - 131.3.

³⁹ Introduced at *Burhān*, II.7, p. 162.4-5; *De divisione philosophiae*, p. 124.20-22; properly discussed at *Burhān*, II.7, pp. 162.10 - 166.15; *De divisione philosophiae*, pp. 125.4 - 131.3.

⁴⁰ *Burhān*, II.7, pp. 162.10 - 165.2; *De divisione philosophiae*, pp. 125.4 - 128.25.

⁴¹ *Burhān*, II.7, p. 162.11-13; *De divisione philosophiae*, p. 125.8-11.

⁴² *Burhān*, II.7, pp. 162.13 - 165.2; *De divisione philosophiae*, pp. 125.11 - 128.25.

⁴³ *Burhān*, II.7, p. 163.14-20; *De divisione philosophiae*, pp. 126.20 - 127.4.

⁴⁴ *Burhān*, II.7, pp. 163.21 - 164.2; *De divisione philosophiae*, pp. 127.5 - 127.12.

⁴⁵ *Burhān*, II.7, p. 164.3-7; *De divisione philosophiae*, p. 127.13-24.

⁴⁶ *Burhān*, II.7, pp. 164.10 - 165.2; *De divisione philosophiae*, p. 128.1-25. Notes are a species of the subject of physics (sounds); but music investigates them only insofar as they express numerical ratios, and hence music is subordinated to arithmetic, not to physics. The difference between (ii) and (iv) is

[*abab*] second type of 'umūm : implicate (one and being) (subordination)⁴⁷

Digression on metaphysics (first philosophy)

[Necessity of a science more general than all other sciences ; the principles of the latter are certified in that science ; conditional character of the principles of all subordinate sciences]⁴⁸

[Difference between first philosophy, dialectic and sophistics in (i) subject, (ii) principles, and (iii) goals]⁴⁹

[*abb*] α and β partially overlap (they have something in common and something distinct)
medicine - *ethics*⁵⁰

[*b*] Difference with respect to one and the same subject⁵¹

[*ba*] one science investigates the subject absolutely, the other in some respect
*physics*⁵² - *medicine* (body - human body insofar as it is *healthy* or *sick*)

[*bb*] one science treats the subject in way, the other science in another way
astronomy - *physics*⁵³

that, in the former case, the subordinate science does not fall under the science that investigates the accident qualifying the more general subject, but rather under the science that investigates that more general subject. In the latter case, by contrast, the subordinate science falls under the science that investigates the qualifying accident. It should be noted that at the beginning of the chapter, when Avicenna draws the distinction between cases where there is a genuine genus-species relation and cases where the more general subject is a genus for an accident of a species, he illustrates the latter with the pair physics-music. This, however, is not in contradiction with what he later says about arithmetic and music. In fact, in order to identify the subject of music (numerical ratios holding between certain sounds), we need to appeal indirectly to the subject of physics, of which sounds are a species. That Avicenna is aware of the peculiar status of this relation is shown by his own insistence on the necessity to keep the two pairs distinct. Yet, the subject of music is related to that of physics in the way an accident of a species is related to the genus.

⁴⁷ Introduced at *Burhān*, II.7, p. 162.10-11; *De divisione philosophiae*, p. 125.4-8; properly discussed at *Burhān*, II.7, pp. 165.3 - 166.15; *De divisione philosophiae*, pp. 128.1 - 131.3.

⁴⁸ *Burhān*, II.7, p. 165.11-16; *De divisione philosophiae*, pp. 129.17 - 130.1.

⁴⁹ *Burhān*, II.7, pp. 165.17 - 166.15; *De divisione philosophiae*, pp. 130.1 - 131.3.

⁵⁰ *Burhān*, II.7, p. 162.6-9; *De divisione philosophiae*, pp. 124.22 - 125.3.

⁵¹ *Burhān*, II.7, pp. 166.16 - 167.10; *De divisione philosophiae*, pp. 131.4 - 132.7.

⁵² I.e., the part of physics that deals with human beings (it is unclear whether Avicenna collectively means the ideal union of texts that deal with human beings, encompassing at least the relevant parts of *De anima* and *De animalibus*, or something more specific).

⁵³ Avicenna almost certainly is referring in this case to the section of physics corresponding to the *De caelo*. The analysis of this point hinges entirely on the fact that astronomy and (this part of) physics both deal with the shape of the universe. Note that this set of remarks is not incompatible with what Avicenna contends above, namely that astronomy is subordinate to geometry and not

[Part II. Second classification : sciences sharing in principles, subjects, and questions]⁵⁴

[1] principles⁵⁵

[1.1] equal in rank⁵⁶
geometry - arithmetic

[1.2] prior in the more general science, posterior in the less general science
geometry - optics ; arithmetic - music

[1.3] something is a principle in one science and a question in the other

[1.3.1] subjects are distinct, one being more general than the other

[1.3.1.1] question proven in the higher science, principle assumed in the lower science

[1.3.1.2] question proven in the lower science, principle assumed in the higher science

[1.3.2] subjects are distinct, neither being more general than the other : questions proven in one science are posited as principles in the other⁵⁷
geometry - arithmetic

[2] questions : sharing the predicate term (a shared subject is a necessary condition)⁵⁸

[3] subjects⁵⁹

[3.1] one subject is more general than the other
physics - medicine ; geometry - study of pyramids

[3.2] subjects have something in common and something distinct
medicine - ethics

[3.3] subject is one but investigated in different respects
astronomy - physics

to physics. This point is in fact the natural complement of the previous one. After showing that astronomy is subordinate to geometry because it is concerned with moving *spheres*, Avicenna goes on to explain that astronomy and a certain area of physics are distinct in spite of the fact that they are about the same subject: this is because astronomy only investigates the body of the universe with regard to its purely geometrical properties, while physics investigates it with respect to motion.

⁵⁴ *Burhān*, II.7, pp. 167.11 - 168.16 ; *De divisione philosophiae*, pp. 132.8 - 133.24.

⁵⁵ *Burhān*, II.7, pp. 167.15 - 168.7 ; *De divisione philosophiae*, p. 133.7-11.

⁵⁶ Avicenna gives as an example for this group the principle that equals being subtracted from equals result in equals, which is not a principle of geometry more than it is a principle of arithmetic (or conversely). In this respect the two sciences are on a par.

⁵⁷ This type is explicitly illustrated by a reference to the tenth book of the *Elements*.

⁵⁸ *Burhān*, II.7, p. 168.8-9 ; *De divisione philosophiae*, p. 133.7-11.

⁵⁹ *Burhān*, II.7, p. 168.10-16 ; *De divisione philosophiae*, p. 133.11-24.

This concludes Avicenna's analysis of the different ways in which sciences may or may not have elements in common. The question of the criteria of identity and distinctness for the sciences is unsurprisingly rooted in the *Posterior Analytics*, not just in virtue of a general conceptual framework where an ontological division of the underlying subjects demarcates the epistemological space of inquiry into distinct domains: this much is in fact also addressed, if only briefly, by Aristotle in A28⁶⁰. Avicenna's treatment of this subject, however, brings it to an entirely different level. While being ultimately inspired by similar principles, it provides an original and much more systematic analysis, illustrated exhaustively, case by case, by a variety of examples that supposedly cover all the basic relations between the most fundamental branches of scientific knowledge.

II. TEXTUAL REMARKS

With this map of *Burhān*, II.7 at hand, we can now turn to a number of critical textual issues, whose significance will hopefully be easier to appreciate against the conceptual background developed thus far. As I pointed out above, the chapter is relevant not only for its philosophical content but also interesting from a textual standpoint, and this in two ways: the Arabic text contributes to a better understanding and several potential improvements of the Latin. Conversely, the latter occasionally sheds light on difficult points of the Arabic as available in current printings and seems indirectly to belong to a specific branch in the transmission of *Burhān*.

The textual remarks below include a number of insights that have already appeared in print and which were put forward first by Hugonnard-Roche and, especially, Janssens⁶¹.

Relevant portions of the text are underlined both in Arabic and in Latin to facilitate their identification.

1. *Incipit* (*Burhān* II.7, p. 162.1-2; *De divisione*, p. 124.11-13)

نقول إن اختلاف العلوم الحقيقية هو بسبب موضوعاتها وذلك السبب إما
اختلاف الموضوعات وإما اختلاف موضوع

⁶⁰ On the notion of subordination in Aristotle, see R. MCKIRAHAN, *Aristotle's Subordinate Sciences*, «British Journal for the History of Science», 11, 3, 1978, pp. 197-220.

⁶¹ See HUGONNARD-ROCHE, *La classification des sciences de Gundissalinus* cit. and JANSSENS, *Le De divisione philosophiae de Gundissalinus* cit. The results are presented here not for the sake of pedantry but to group them in a single source.

« *Dicam* quod causa diversitatis *ceterarum* scientiarum est *subiecta* [for *substantia in Baur*] earum. Illa autem causa vel est propter diversitatem subiectorum vel propter diversitatem *unius* subiecti ».

(1.1) In connection with the *incipit* of the chapter, both Hugonnard-Roche and Janssens already noted that *substantia* in Baur's edition stands in need of correction. *Subiecta* is not only required by the sense of the passage: the variant is attested by one of the manuscript used by Baur (Digby 76, *siglum* D in his apparatus) and also supported by Oxford, Bodleian ms. 675.

Furthermore, it is unambiguously supported by the Arabic *mawḍū' ātiḥā*⁶².

(1.2) Janssens suggests *certarum* as a potentially better reading than *caeterarum* (contingent on further textual evidence from the manuscript tradition of the *De divisione*). The variant is textually easy to justify in virtue of the similarity of the two Latin words and supported by the Arabic *ḥaqīqīyya* with a significant gain in sense. The position of the chapter in the *De divisione* hardly requires, and is possibly even inconsistent with, what *caeterarum* implies; for what is at stake here is the status of scientific disciplines aiming at certitude, i.e., those discussed in the first part of the *De divisione*, not of a putative group of *other* sciences.

(1.3) Janssens notes that ms. Bodleian 675 reads *dicimus* instead of Baur's *dicam*, a variant that would more closely correspond to the Arabic *naqūlu*⁶³.

(1.4) One last point concerns the term *unius*. The Arabic *wāḥid* is found in Badawī's text, which registers its omission in ms. Cairo, Al-Azhar, Beḥīt 331, and absent in 'Afīfī's text, which signals its presence in ms. Istanbul, Damad 824. This fact, which in and of itself may be of little importance, is one of a number of instances showing agreement between the Latin and what looks like a specific branch in the transmission of the Arabic (including at least ms. Istanbul Damad 824 and ms. Leiden Golius 4).

2. 'Scientific' or 'Practical' (علمي\عملي)? (*Burhān*, II.7, p. 162.8-9; *De divisione*, pp. 124.25 - 125.3)

ثم يختص الطب بالنظر في جسد الإنسان وأعضائه ويختص علم الأخلاق بالنظر في النفس الناطقة وقواها العملية

⁶² As noted by both Hugonnard-Roche and Janssens, the first required emendation concerns in fact the very title of the chapter in Latin: *Summa Avicennae de convenientia et differentia subiectorum*, instead of the *scientiarum* for the Arabic *'ulūm* (the emendation is confirmed by ms. Bodleian 679, fol. 16v; cf. JANSSENS, *Le De divisione philosophiae de Gundissalinus cit.*, p. 562).

⁶³ See JANSSENS, *Le De divisione philosophiae de Gundissalinus cit.*, p. 563.

«Deinde appropriatur medicinae considerare humanum corpus et eius membra, ethicae vero appropriatur considerare animam rationalem et eius vires scientiales».

(2.1) In discussing the case of medicine and ethics, Avicenna points out that the latter addresses the human body with regard to the rational soul and its practical faculties (*quwātihā* 'amaliyya). There is little doubt that, at least in principle, the Latin text ought to read *practicas* instead of *scientiales* (Baur, p. 125.3), if it is to be at all a translation of the Arabic 'amaliyya. However, given that 'amaliyya is easily confused with 'ilmiyya (cf. Latin *scientiales*), Janssens argues that *scientiales* should be retained, in spite of it being evidently in contradiction with the Arabic (p. 564), warning against the temptation of hyper-correcting. The erroneous reading could easily have crept in the text used by Gundissalinus due to a straightforward scribal error in the transmission of the Arabic or as a result of the translator's own misreading. The point deserves to be explicitly addressed and mentioned by a future critical edition of the Latin text.

3. Kinds of 'umūm (*communicatio*) (*Burhān*, II.7, p. 162.10-11; *De divisione*, p. 125.4-7)

وأما القسم الأول من هذين القسمين فإما أن يكون العام فيه عمومه للخاص
عموم الجنس أو عموم اللوازم مثل عموم الواحد والموجود

«Primum autem membrum huius divisionis, scilicet cum communius communicat cum minus communi, aut communicat ut genus cum specie aut communicat ut communicans sicut est communicatio unius et entis».

The context of this passage is Avicenna's distinction between the two senses of generality ('umūm) that determine the two main sub-types of case [*aba*] (where the subject of a science is more general than the subject of the other). Either the subject of the superordinate science stands to the subject of the subordinate science in a way that is identical or analogous to the way in which a genus stands to its species (or to an accident of the species), or the subject of the superordinate science stands to the subject of the subordinate science in the way 'one' and 'being' stand to every other thing. The latter is a canonical claim in Avicenna's metaphysics, frequently expressed in terms of a relation between something and its implicates (*lawāzim*), which is not a genus-like relation.

The Latin translation is paraphrastic and does not reflect the idiosyncrasy of the Arabic syntax. The Arabic text literally reads: «The first of these two divisions is [such that] in it either (i) the generality of the [more] general [viz. the subject of the superordinate science] to the [more] specific [viz. the subject of the subordinate science] is the generality of the genus or (ii) [it is] the generality of the implicates, like one and being».

(3.1) The editions of the Arabic text do not have anything corresponding to the Latin *cum specie*. Janssens notes that the variant may be explained as an authorial intervention by Gundissalinus aimed at clarifying the text. It is worth noting that the addition may also be inspired by a closely related passage (see text 4) where Avicenna uses the parallel expression *wa-ammā llaḏī 'umūmuhū fīhi 'umūm al-ḡins li-n-naw'*.

(3.2) *Communicans*, as already noted by Janssens, should in fact be *comitantes* (Janssens) or *concomitantes* ('implicate', 'concomitant'), for the Arabic *lawāzim* (sing. *lāzim*), a crucial technical term in Avicenna's metaphysics and logic, which indicates a relations of inseparability, typically distinct from and weaker than the relation of being a constituent (the latter is the type of relation held by genus and differentia with regard to the species). Thus, 'one' and 'being' are *lawāzim* of all things without being their constituents. The reading is supported by witnesses in the Latin transmission of the text not used by Baur (cf. Janssens, p. 563: ms. Vat. Reg. 1870 reads *ut comitans*, fol. 15v and ms. Bodleian 679, fol. 16v, *ut comicans*).

(3.3) *Communicatio* and cognates are semantically assimilated to *commune/communitas* (for 'umūm) and used here in the sense of 'being general' or 'being common', to distinguish two ways in which something may be more general than something else: one is the way in which the genus is (more) general (or common) with respect to the species, the other is the way in which non-generic notions (like 'one' and 'being', which are not genera but implicates (*lawāzim*)) are (more) general (or common) with respect to their subjects⁶⁴.

4. Pyramids/Solids (*Burhān*, II.7, p. 162.11-12; *De divisione*, p. 125.8-11)

وأما الذي عمومته فيه عموم الجنس للنوع فهو كالنظر في المخروطات على أنها
من المجسمات والمجسمات على أنها من المقادير

« Id autem in quo est communicatio ut generis ad speciem est sicut speculatio de pyramidibus secundum quod sunt de corporeis et de corporeis secundum quod sunt de mensuris ».

(4.1) Gundissalinus correctly translates the Arabic *maḥrūṭāt* as *pyramidibus*. The vocabulary is consistent with Avicenna's own usage in his treatment of *Elements* XI. The alternative translation ('the science of conics') proposed by A.

⁶⁴ See n. 10 above.

Ahmed for parallel occurrences of the term in the *Nağāt* is intriguing but does not seem to do justice to Gundissalinus' insight. The doctrinal point is best understood if the subject of the subordinate science is in fact a genuine species of the genus 'solid'. One may think of the science of pyramids as the collection of definitions and demonstrative proofs concerning this particular type of solid and as a part of the science of solids (in just the same way in which the science of solids is a part of the science of extended magnitudes or continuous quantities, i.e., of geometry *tout court*).

5. 'Being part' of a science and 'falling under' a science (*Burhān*, II.7, p. 162.15-17; *De divisione*, p. 125.14-19)

وهذا القسم نقسمه على قسمين قسم يجعل الأخص من جملة الأعم وفي علمه حتى يكون النظر فيه جزءا من النظر في الأعم وقسم يفرد الأخص من الأعم ولا يجعل النظر فيه جزءا من النظر في الأعم ولكن يجعله علما تحته

«Et hoc membrum dividitur in duo quorum unum ponit minus commune de universitate communioris et in causa eius ita ut speculatio eius sit pars speculationis communioris; alterum vero assolat minus commune a communiore et speculationem eius non ponit partem speculationis magis communis sed ponit eam scientiam sub eo».

(5.1) The passage raises another point worthy of consideration for a future editor of the *De divisione*. Hugonnard-Roche already noted that the Latin *in causa eius* does not reflect the Arabic *fī 'ilmihi* and should in fact be replaced by *in scientia eius*. The latter is certainly required by the sense but the question will have to be settled in light of further evidence from the manuscript tradition of the Latin text. A warning against the risk of hyper-correcting analogous the one expressed above (see text 2) applies here, too, because of the similarity in Arabic of *fī 'ilmihi* and *fī 'illatihi*. I reproduce here the entire passage for its relevance in the economy of the chapter, as this is where the crucial distinction between the notion of 'being part of' as opposed to that of 'falling under' a science is first introduced.

(5.2) Badawī's text reads *yūqassimuhū* for *nuqassimuhū*.

(5.3) The Latin translates *yufridu* as *assolat*, which in classical Latin is attested only in the sense of 'level to the ground' (i.e., destroy). Baur's D reads *absolvit* but an innovative understanding of *assolare* as a calque of the Arabic in the sense of 'isolate', 'single out' would not seem entirely implausible and would constitute a

significant gain in sense with respect to *absolvere*. Be this as it may, the meaning of the Arabic is that the less general is identified, singled out or marked off with respect to the more general in one of several ways. Compare with (7.4) below.

6. The case of parthood (*Burhān*, II.7, p. 163.1-3; *De divisione*, pp. 125.20 - 126.1)

والسبب في هذا الانقسام هو أن الأخص إما أن يكون إنما صار أخص بسبب
فصول ذاتية ثم طلبت عوارضه الذاتية من جهة ما صار نوعا فلا يختص النظر
بشيء منه دون شيء وحال دون حال بل يتناول جميعه مطلقا وذلك مثل
المخروطات للهندسة

« Causa autem huius membri haec est quod minus commune non fit nisi propter differentias suae essentialitatis; et deinde inquiruntur eius accidentia essentialia secundum quod per ea fit species, unde speculatio eius non appropriatur circa unum horum tantum et non aliud necque secundum unam tantum dispositionem et non secundum <aliam sed continet> omnia simul absolute, sicut pyramides ad geometriam ».

This tortuous passage provides a justification for the subdivision of case [abaa] (the first type of 'umūm, exhibiting a genus-like relation) into its sub-cases. What matters for our purposes is to note two crucial ways in which the current Latin text significantly betrays the sense of the Arabic.

(6.1) C and D in Baur's apparatus add *minus commune* to *nisi fit*, fully in line with the Arabic.

(6.2) The Latin *propter differentias suae essentialitatis* inaccurately renders the Arabic *bi-sabab fuṣūl dātiyya* 'in virtue of some essential differentiae'. While discussing the relation between the more general and the more specific, Avicenna argues that in one case the more general becomes more specific as a result of specifying the genus through its essential (dividing) differentiae. The misreading is easily understandable on account of the similarity in Arabic between *dātiyya* and *dātiyyatihī*, where *dātiyya* is taken as an abstract noun (cf. the Latin *essentialitas*) rather than as an attribute of *fuṣūl* (in which case one would have expected *essentiales* instead). Once again, locating at what point of the transmission (Arabic or Latin) the error emerged is not possible on purely philological grounds at this stage, and the decision whether to emend or not will have to lie with the future editor of the text, possibly in light of additional evidence. However, it should be noted that the Latin text, as it stands, is doctrinally implausible.

(6.3) Another difficulty is represented by the presence of *per ea*. The addition, which is not justified by the Arabic, where a counterpart (possibly *bihā*) for the expression is nowhere to be found, may be read in two ways. If the *ea* were to refer to *eius accidentia essentialia* (i.e., the *per se* accidents of the less general subject) Avicenna would be claiming, contrary to his standard views, that the object of scientific inquiry are *per se* accidents *through which* the subject of the more general, superordinate science becomes a species (the subject of the less general, subordinate science). But the point of the passage is that once the subject of the more general science is specified *through a differentia* and becomes the subject of the less general science (e.g., by adding the suitable differentia to the genus ‘solid’ to yield the species ‘pyramid’), then one seeks the *per se* accidents of the subject insofar as the latter has become a species (and not insofar as it has become a species through them). Thus, if *per ea* reflects Avicenna’s text (which should be corroborated by new manuscript evidence), this may only be the case if the referent in Arabic is *fuṣūl dātiyya*. The sentence would then read as follows: «then one investigates the accidents *per se* of [the less general subject] insofar as the latter becomes a species in virtue of [those essential differentiae]». The issue is relevant for an improved edition of both texts.

(6.4) The Arabic reads *fa-lā yaḥtiṣṣu an-naẓar bi-ṣay’ in minhu dūna ṣay’ in wa-ḥālin dūna ḥālin bal yatanāwalu ḡamī’ ahū muṭlaqan*, i.e., «the investigation of the less general is not exclusively proper to one [accident *per se*] without another or to one state without another, but rather covers them all without qualification». The Latin is not perspicuous. We may hypothesize that *yatanāwalu* was missing in the model used by Gundissalinus and that the current text, if correct, is an attempt to rescue the sense. Alternatively, we may assume that the error arose in the transmission of the Latin translation. That the passage suffered is confirmed by two variants in Baur’s apparatus (ms. Digby 76: *secundum aliam sed secundum omnia simul* – a reading which is very close to the Arabic and raises the question whether *quod continet* (or another verb, translating *yatanāwalu*) might have fallen out; and ms. Oxford, Corpus Christi 86: *et non aliam sed secundum aliam simul*) as well as by ms. Bodleian 679: *et non aliam sed secundum aliam simul*. The above solution is conjectural.

7. The general case of subordination (*Burhān*, II.7, p. 163.9-11; *De divisione*, p. 126.12-17)

وإما أن يكون الشيء الذي صار به أخص ليس يجعله نوعاً بل يفرد صففاً
ويعارض فينظر فيه من جهة ما صار به أخص وصففاً ليبحث أي عوارض ذاتية
تلزمه وهذا أيضاً يفرد العلم بالأخص عن العلم بالأعم ويجعله علماً تحته

« Aut cum id quod facit rem minus communem non facit eam speciem, sed facit eam aliquam maneriam cum accidente, et tunc consideratur ipsa secundum quod fit minus communis. Materia vero inquisitionis sunt accidentia eius essentialia et comitantia et hoc est etiam quod assolat scientiam minus communem a scientia magis communi et ponit eam scientiam sub ea ».

(7.1) Avicenna argues that the different types of combinations of a general subject and various kinds of accidents determining the subject of a subordinate science typically do not yield genuine natural kinds but something he refers to by means of the term *şinf*. The latter occurs twice in the above passage in Arabic but is rendered by Gundissalinus, according to the current edition, once as *maneriam* (for the classical Latin *maneriem*), and once as *materia* (P reads *maneria* in this second case, which might help towards a solution). It is likely that the error may have resulted from a misunderstanding of the Arabic, where the second occurrence of *şinf* is paired with *aḥaṣṣ* (*minus communis*) instead of becoming the subject of the next sentence (the Arabic reads « thus it is investigated with respect to what makes it less general and a *şinf*, in order to seek the *per se* accidents that necessarily follow from it »).

(7.2) The second occurrence of *şinf* is tacitly omitted in Badawī's text, which only reads *min ġihat mā šāra bihī aḥaṣṣa*, without registering variants in the pseudo-apparatus.

(7.3) The Latin *cum accidente* would be a natural translation of *bi- 'āriḍ*, which is in turn a plausible alternative (not attested by the editions) for *yu 'āriḍ*. This would not solve the problem, but the textual option seems worthy of consideration.

(7.4) An additional problem is raised by the third *facit*, which is a surprising translation for the first occurrence of *yufriḍu*. The latter is translated as *assolat* (only attested in classical Latin in the sense of leveling to the ground) in its second occurrence, presumably to mean 'isolate' or 'single out', which seems a plausible, if idiosyncratic, translation of the Arabic.

Ms. D in Baur's apparatus has *absolvat* (and in case 5 *absolvit*) which may offer an alternative but semantically less satisfactory solution. Compare with (5.3) above.

8. Subordination : case (ii) (*Burhān*, II.7, pp. 163.22 - 164.2; *De divisione*, p. 127.8-12)

وقد أخذ الموضوع مع ذلك العارض الغريب شيئاً واحداً ونظر في العوارض الذاتية التي تعرض له من جهة اقتران ذلك الغريب به مثل النظر في الأكر المتحركة تحت النظر في المجسمات أو الهندسة

«et tunc accipitur illud subiectum cum illo accidente extraneo ut unum et considerantur accidentia essentialia quae accidunt ei ex accidenti illius extraneitatis sicut est speculatio de sphaeris mobilibus quae est sub speculatione corporum vel geometriae».

The investigation of the moving spheres is subordinated to geometry because its subject is a special kind of geometrical object (spheres) qualified in a certain way (as moving). Astronomy investigates this subject not in the way geometry does, i.e., as such, but rather insofar as a foreign (extrinsic) accident is associated with it, namely motion. Thus, astronomy cannot be *part* of geometry because its subject are not spheres without qualification (the study of spheres, just like the study of pyramids, would indeed be a part of geometry) but rather spheres insofar as they are moving.

(8.1) The Latin text does not reflect properly the clear sense conveyed by the Arabic which reads «insofar as that foreign [accident] is connected to it [viz. to the subject of the subordinate science]» (*min ġihat iqtirāni dālīka l-ġarībī bihi*). There is no clear counterpart to *ġiha* and *iqtirān*, and *ġarīb* is rendered by the abstract term *extraneitatis*.

In the rest of the chapter Gundissalinus usually translates *iqtarana* and derivatives with the Latin *adiungere* and derivatives (eleven occurrences in total)⁶⁵. While the absence of *parte* does not entail an accidental omission (*min ġiha* is often translated by *ex* only — for instance in the *De anima* of the Avicenna latinus), an abbreviated form of the correct term *adiunctionis* may have been mistakenly read by a copyist as *accidentis*, which would be *lectio facilior*. If such an error occurred, it must have been at an early stage in the transmission as there seems to be no significant variant for this passage in the manuscript tradition.

(8.2) The Latin *quae est* before *sub* may simply be seen as a grammatical way to render the more elliptic structure of the Arabic passage and to connect *al-mutaḥarrika* with *tahta*. The latter are separated by *fa-innahū* in Badawī's edition, which reports the omission as a variant in ms. Cairo, Al-Azhar, Beḥīt 331. 'Afīfī's text omits the lemma but reports it as variant in ms. Istanbul, Damad 824. The reading is also attested in ms. Leiden, Golius 4. However, the variant would most likely have been rendered in Latin by *enim* and it is reasonable to assume that the translator was looking at a text that did not have it.

⁶⁵ At *De divisione*, p. 127.17 *iqtirān* is rendered as *coniunctio*, but for the purposes of our passage, the confusion between *adiunctio* and *accidens* is slightly more likely than that between *coniunctio* and *accidens* (the latter cannot be ruled out altogether due to the standard abbreviation for *con-*).

9. Subordination : cases (i)-(iii) (*Burhān*, II.7, p. 164.8-9 ; *De divisione*, p. 127.21-24)

وهذه الأقسام الثلاثة تشترك في أن الشيء المقرون به العارض الموصوف هو من جملة طبيعة الموضوع للعلم الأعلى من العلمين فيحمل موضوع الأعلى عليه

«Hi autem tres modi conveniunt in hoc quod id quod adiungitur ei scilicet accidens praedictum est de universitate naturae subiecti superioris duarum scientiarum unum et subiectum superioris praedicatur de eo».

(9.1) The Arabic text reads *aš-šay' al-maqrūn bihī al-ārīḍ al-mawṣūf*, i.e., « what the described accident is connected to » which unequivocally — and correctly — refers to the subject (that the accident qualifies). The introduction of *scilicet* in the Latin produces an ambiguous effect as it seems to suggest that the roles of the subject and the accident may be inverted, if *accidens praedictum* is not just the grammatical subject of *adiungitur*, but stands for the whole expression *id quod adiungitur ei*.

(9.2) The presence of *unum* is also problematic and has no correspondence in the Arabic. It may result from a misreading or from a repetition of the final *-um* of *scientiarum*, or be due to the supposition of a copyist that since two sciences are mentioned, the additional qualification 'one' is required or at least appropriate.

10. Subordination : case (iv) (*Burhān*, II.7, p. 164.13-14, 16-17 ; *De divisione*, p. 128.8-9, 13-17)

فتطلب لواحقها من جهة ما اقترن ذلك الغريب بها لا من جهة ذاتها [...] وإنما قلنا لا من جهة ذاتها لأن النظر في النعمة من جهة ذاتها نظري في عوارض موضوع العلم الأعم أو عوارض عوارض أنواعه وذلك جزء من العلم الطبيعي لا علم تحته

«Unde inquiruntur consequentia eorum secundum quod adiungitur eis illud extraneum <non quantum in se> [...] Nec dicimus hoc "<non> quantum in se" <nisi> quoniam consideratio neumatis quantum in se est consideratio accidentium subiecti scientiae communioris vel accidentium accidentibus suarum specierum et haec est pars scientiae naturalis non scientia sub ea».

The text of this passage presents interesting difficulties and is one of the most significant cases in the whole chapter where the Latin is either in need of emendation or at least worthy of being flagged for the future editor. The context of the discussion is Avicenna's analysis of the relation between music, arithmetic, and physics. Music is subordinated to arithmetic in virtue of the fourth and weakest kind of subordination identified above, whereby the subject

of a subordinate science *A* is a species of the subject of another science *B* qualified by an accident which is studied by science *C*, which is superordinate to *A*. Avicenna is keen to point out explicitly that the subordinate science *A* investigates its subject ‘not as such’ but rather insofar as it is qualified by that accident, otherwise *A* would be *part* of *B* rather than being subordinated to *C*. A critical step of the argument is lost in the Latin translation⁶⁶.

(10.1) The first occurrence of *lā min ġihat dātihā*, which is crucial to the sense of the whole passage, is missing in the Latin text (I have supplied it between angled brackets). If the omission were due to *homoioteleuton*, the only option would be from *min ġiha* to *min ġiha*, which, however, cannot explain the actual omission in the Latin. At best, one may suppose an accidental omission in the Arabic or in the Latin. Another possibility is a conscious omission on behalf of the translator, who might have regarded the occurrence of *lā min ġihat dātihā* right after *al-ġarīb bihā* as redundant because it expresses the same thought in different terms (‘foreign’, ‘not as such’). Whatever the origin of the error, the text has to be amended for the passage to make sense as a whole.

(10.2) The rest of the Arabic text reads *wa-innamā qulnā lā min ġihat dātihā li-anna*, «we said ‘not as such’ just because» seems to require two further emendations, namely (i) the addition of *non* before *quantum in se* to match the expression in the previous sentence, which is now being quoted rather than used⁶⁷ and (ii) of *nisi* before *quoniam*, which completes the construction *nec dicimus ... nisi quoniam* as the correct literal translation of *wa-innamā qulnā ... li-anna*. As a result, the Latin would read *nec dicimus “non quantum in se” nisi quoniam*, which would be a perfectly admissible translation for the Arabic *wa-innamā qulnā lā min ġihat dātihā li-anna* (the use of *non ... nisi* for the Arabic *innamā*

⁶⁶ Avicenna goes on to note that case (iv) differs from case (ii) in the following way. In both cases the subject of the subordinate science is the subject of the superordinate science qualified by a foreign accident. Assuming that α is the more general subject qualified by an extrinsic accident γ in order to become the more specific subject β , case (ii) obtains when the relation that matters is the one between α and β , irrespective of γ (γ only matters because it is the reason why the science of β is not a part of the science of α but rather only subordinate to it); case (iv) obtains when the relation that matters is the one between β and γ . Thus, the science of astronomy (whose subject are the moving spheres) falls under (a part of) geometry (dealing with spheres) and not physics (motion), while music (notes, i.e., sounds with respect to numerical ratios) falls under arithmetic (numerical ratios) and not physics (sounds). In (ii) what matters is the relation between subjects in common, in (iv) the relation between the accident that qualifies the subject of the subordinate science and the subject of another science.

⁶⁷ It is also possible that confusion between *non* and *hoc* due to their standard abbreviations may have resulted in the transmission of the Latin translation, which could partially explain the omission of *nisi*. The hypothesis should be verified against the manuscript tradition of the Latin text by the future editor.

is canonical for Gundissalinus). The question remains whether the text above reflects Gundissalinus' struggle with a corrupt model or a series of errors in the transmission of his Latin translation.

11. First Philosophy : a modal inaccuracy (لا يجوز as *non oportet*) (*Burhān*, II.7, p. 165.6-9; *De divisione*, p. 129.7-13)

ولأنه لا موضوع أعم منهما فلا يجوز أن يكون العلم الناظر فيهما تحت علم آخر ولأن ما ليس مبدءاً لوجود بعض الموجودات دون بعض بل هو مبدءاً لجميع الموجودات المعلول فلا يجوز أن يكون النظر فيه في علم من العلوم الجزئية ولا يجوز أن يكون بنفسه موضوعاً لعلم جزئي

« Et quia nullum subiectum est communius eis tunc *non oportet* ut scientia quae tractat de eis sit sub alia scientia. Et quia id quod non est principium unius entium absque alio, immo est principium omnis quod est causatum, ideo *non oportet* ut speculatio de eo sit in aliqua scientiarum particularium *nec oportet* ut per se sit subiectum alicuius scientiae particularis ».

The passage is part of the digression on metaphysics where Avicenna establishes the necessity of a science more general than all other sciences, that the principles of the latter are proven with certainty in the former, and the conditional character of the principles of all subordinate sciences (on which see text 12).

(11.1) The translation fails to capture the correct modal nature of the claim being made by Avicenna, whose point is much stronger than what is conveyed by the Latin: it is impossible (*lā yaǧūzu*), rather than merely not necessary (*non oportet*), (i) for first philosophy to fall under another science, (ii) for the investigation of the principles of everything caused to be the prerogative of any particular science (mathematics, logic, physics and their subdivisions), and (iii) for the subject of first philosophy to be the subject of any particular science. It is perhaps worth mentioning that the same translation is present in Avicenna latinus, *De anima*, I-III, p. 246.70 (but only on one single occasion)⁶⁸.

12. Scientific statements in sciences other than first philosophy are conditionals (*Burhān*, p. 165.12-16; *De divisione*, pp. 129.21 - 130.1)

فيجب أن تكون مبادئ سائر العلوم تصح في هذا العلم فلذلك يكون كأن جميع العلوم تبرهن على قضايا شرطية متصلة مثلاً إنه إن كانت الدائرة موجودة

⁶⁸ I owe the reference to one of the anonymous referees.

فالمثلث الفلاني كذا أو المثلث الفلاني موجود فإذا صير إلى الفلسفة الأولى يبين
وجود المقدم فيبرهن أن المبدأ كالدائرة مثلاً موجود فحينئذ يتم برهان أن ما يتلوه
موجود فكأن ليس علم من الجزئية لم يبرهن على غير شرطي

«Oportet igitur principia ceterarum scientiarum certificentur in hac scientia. Hoc autem sic erit quasi omnes scientiae probentur argumentationibus hypotheticis coniunctis verbi gratia: si circulus est, talis vel talis triangulus est. Cum autem pervenerimus ad philosophiam primam, tunc manifestabitur esse antecedentis [for antecedens in Baur; supported by DP] cum probabitur quod principium scilicet circulus habet esse; et tunc complebitur probatio consequentis quod habet esse et ita quia nulla scientiarum particularium probetur sine hypothetica».

The context of this passage is again the discussion of metaphysics at the end of the first part of the chapter. What is at stake here is the status of the principles of all sciences other than metaphysics, which according to Avicenna are ultimately established, i.e., demonstratively proven, in that superordinate science. This dependence determines their logical form as conditionals.

(12.1) The use of the passive *probentur* in conjunction with *argumentationibus hypotheticis coniunctis* does not reflect the Arabic. On Avicenna's model, the scientific statements proven in the other sciences acquire a hypothetical status, i.e., they are construed as claims that have an antecedent (proven in metaphysics) and a consequent. What the particular sciences do is to prove those conditional statements. Thus, the phrase 'alā qaḍāyā šarṭiyya mutṭaṣila (Lat. *argumentationibus hypotheticis coniunctis*) 'hypothetical conditional propositions' expresses the object of proofs in the particular sciences, not something by means of which the content of the latter is putatively established. The confusion is likely due to a failure to recognize that 'alā introduces the object of *barhana*.

(12.2) The passage *fa-l-muṭallatu l-fulānī kaḍā aw al-muṭallatu l-fulānī mawǧūd* expresses the distinction between two kinds of scientific statements, depending on whether the proof establishes a predicative claim ('such-and-such a triangle is so') or an existential claim ('such-and-such a triangle exists'), in line with Avicenna's account the two fundamental types of scientific if-questions⁶⁹. The distinction is lost in the Latin, most likely due to an omission by (quasi-)homoiooteleuton. It is hard to identify the stage at which the error may have emerged, but the sense of

⁶⁹ See R. STROBINO, *What If That (Is) Why? Avicenna's Taxonomy of Scientific Inquiries*, in A. ALWISHAH, J. HAYES eds., *Aristotle and the Arabic Tradition*, Cambridge University Press, Cambridge 2015, pp. 50-75.

the Latin is at best incomplete as it merely captures the existential component of the disjunctive claim put forward in Arabic. A conjectural solution may be *talis <triangulus est talis (or : huiusmodi)> vel talis triangulus est*.

(12.3) The Arabic *laysa 'ilm min al-ğuz'iyya [lam] yatabarhan 'alà ġayr šarṭi* indicates that no particular science proves anything other than hypothetical (conditional) statements, where (i) 'alà introduces once again the object of *barhana* and (ii) either *lam* (most likely, for syntactic reasons) or *ğayr* is omitted. By contrast, the Latin text seems to suggest that the particular sciences are proven only through conditionals. 'Afifî registers as a variant from ms. Istanbul Damad 824 *fa-ka-anna 'ilman min al-ğuz'iyya lam yubarhan 'alà ġayr aš-šarṭi* which omits *laysa* at the beginning of the sentence and conveys a much weaker meaning.

13. Difference between first philosophy, dialectic and sophistics with respect to their subjects (*Burhān*, II.7, p. 166.1-4; *De divisione*, p. 130.5-10)

أما في الموضوع فلأن الفلسفة الأولى إنما تنظر في العوارض الذاتية للموجود والواحد ومبادئهما ولا تنظر في العوارض الذاتية لموضوعات علم علم من العلوم الجزئية والجدل والسوفسطائية ينظران في عوارض كل موضوع كان ذاتيا أو غير ذاتي ولا يقتصر ولا واحد منهما على عوارض الواحد والموجود

« In subiecto eo quod philosophia prima non considerat nisi accidentia essentialia <entis et unius et principia eorum et non considerat accidentia essentialia> subiectis uniuscuiusque scientiarum particularium. Topica vero et sophistica speculantur accidentia cuiusque subiecti sive sint essentialia sive non sint essentialia. Unde nulla earum intendit de accidentibus unius vel entis ».

After introducing the necessity of first philosophy as a science more general than all other sciences in which the principles of the latter are justified, Avicenna addresses the question of how this discipline differs from two other putative candidates for the same role, namely dialectic and sophistics. He argues that they differ with respect to subjects, principles, and goals.

(13.1) In connection with the first parameter, the above passage is perfectly consistent with Avicenna's views on what metaphysics as a science investigates, while the Latin translation makes a doctrinally unacceptable point due to a textual error. In the text of Baur's edition nothing corresponds to the crucial clause *li-l-mawğūd wa-l-wāḥid wa-mabādi'ihimā wa-lā tanzuru fī*. The passage is also discussed by Janssens, who rightly maintains that the text as it stands in

Latin does not make sense and that the Arabic attested without variant in the two editions should be used as a basis for an indispensable emendation, in spite of this being a straightforward instance of *homoioteleuton* which could have originated at any stage of the transmission of the Arabic text itself. It is hard to believe that Gundissalinus would have failed to notice the inconsistency in his model and to correct it. And if the error originated in the transmission of the Latin translation, the emendation would be even more justified to save the sense of the entire passage. For if the Latin in its current form were correct, Avicenna would be making the utterly un-Avicennan claim that first philosophy only investigates the *per se* accidents of each particular science. But the *per se* accidents of the particular sciences are obviously the object of the particular sciences themselves, not of first philosophy, which investigates by contrast 'being' and 'one' and *does not*, by Avicenna's explicit admission, investigate (*lā tanẓuru fī*) the *per se* accidents of the particular sciences.

(13.2) The Latin *intendit* has no variant in Baur and the reading is confirmed in ms. Bodleian 675. It should be noted, however, that this is likely a misreading of the Arabic *lā yaqtaṣiru* as *lā yaqtaṣidu* («neither dialectic nor sophistics is restricted to [the investigation of] the accidents of 'one' and 'being'»: Avicenna is arguing that these two disciplines have somehow a larger scope of application than metaphysics). The discrepancy should be registered in a future edition of the Latin text, even in the absence of an emendation, which would constitute a gain in sense but is hard to justify on purely philological grounds, without independent evidence from the manuscript tradition of the *De divisione*.

14. Difference between first philosophy, dialectic and sophistics with respect to their principles (*Burhān*, II.7, p. 166.7-9; *De divisione*, p. 130.15-18)

وقد تفارقهما من جهة المبدأ لأن الفلسفة الأولى إنما تأخذ مبادئها من المقدمات
البرهانية اليقينية وأما الجدل فمبدؤه من المقدمات الذائعة المشهورة في الحقيقة
وأما السوفسطائية فمبدؤه من المقدمات المشبهة بالذائعة أو اليقينية من غير أن
تكون كذلك في الحقيقة

«Differt autem ab eis secundum principium eo quod philosophia prima sumit sua principia ex propositionibus demonstrativis veris; topicae vero principia sunt propositiones probabiles vel vere vel non acceptae secundum quod sunt vere certae [Baur: certe]».

The discussion of the previous passage continues here with regard to the principles. Metaphysics, dialectic, and sophistics differ in that respect because

the first takes as principles only premises that are certain, while the other two use at most reputable premises (dialectic) or even premises that just resemble reputable or certain premises (sophistics).

(14.1) The Arabic has *al-muqaddamāt aḍ-ḍā' i' a al-mašhūra fi l-ḥaqīqati wa-ammā as-sūfiṣṭā'iyya fa-mabda' uhū min al-muqaddamāt al-muṣabbiha bi-ḍ-ḍā' i' a aw al-yaqīniyya min ḡayr an takūna ka-ḍālika fi l-ḥaqīqati* which is an altogether different (and more perspicuous) text according to which «the principles of dialectic really are widespread reputable premises, while the principles of sophistics are premises that resemble widespread reputable or certain [premises] without really being so». The Latin translation seems to be based on a different, and less perspicuous Arabic text, which had most likely already suffered from cumulative mistakes in the transmission.

(14.2) The first occurrence of *yaqīniyya* is rendered in the Latin by *veris*.

(14.3) A possible solution is that an omission (quasi-homoioteleuton: *vere ... veris*) may have occurred during the transmission of the Latin translation. In this case the passage would have been as follows in the original: (*topicae vero*) *principia sunt propositiones probabiles vere* [the Latin following the word order of the Arabic; with *probabiles* as a single translation for both Arabic terms *aḍ-ḍā' i' a al-mašhūra*] *sed sophisticae principia sunt propositiones similes (propositionibus) probabilibus vel veris, sed non* [with Baur's C] *secundum quod sunt verae* [reading *verae* according to the classical Latin spelling as a reformulation of *ka-ḍālika*] *certe*⁷⁰.

15. Difference between first philosophy, dialectic and sophistics with respect to their goals (*Burhān*, II.7, p. 166.10-14; *De divisione*, pp. 130.19-131.1)

وقد تفارقهما من جهة الغاية لأن الغاية في الفلسفة الأولى إصابة الحق اليقين بحسب مقدور الإنسان وغاية الجدل الارتياض في الإثبات والنفي المشهور تدرجا إلى البرهان ونفعا للمدينة وربما كانت غايتها الغلبة بالعدل وذلك العدل ربما كان بحسب المعاملة وربما كان بحسب النفع والذي بحسب المعاملة فأن يكون الإلزام واجبا مما يتسلم وإن لم يكن اللازم حقا ولا صوابا وأما الذي بحسب النفع فرمما كان بالحق وربما كان بالصواب المحمود

«Differt vero ab eis secundum *finem* eo quod finis philosophiae primae est acquisitio veritatis certae secundum possibilitatem hominis; finis vero topicae est exercitium

⁷⁰ I owe the suggestion to one of the anonymous referees.

ponendi vel removendi maximas ut gradatim perveniatur ad demonstrationem et utilitatem civitatis. Aliquando vero finis eius est victoria in iure, quod ius potest esse < ... > secundum quod conveniunt ut consecutio sit necessaria secundum quod conceditur quamvis consequentia non sit vera nec recta. Quod autem est ad utilitatem civitatis aliquando verum aliquando rectum laudabile».

The third way in which metaphysics differs from dialectic and sophistics is with regard to their respective goals.

(15.1) 'Afifi's edition omits *ġāya*, possibly as a result of a mere material error. The term is in Badawī's edition and attested by the Latin *finem*.

(15.2) The Arabic in the central part of the passage reads *wa-rubbamā kāna bi-ḥasab al-mu'āmalā wa-rubbamā kāna bi-ḥasab al-naf' wa-lladī bi-ḥasab al-mu'āmalā fa-an yakūna l-ilzām wāġibān mim mā yatasallamu wa-in lam yakun al-lāzim ḥaqqan wa-lā ṣawāban*. The underlined text is missing from the Latin translation. The *homoioteleuton* may have easily been in the model used by the translator, even though it is worth noting that the passage also shows signs of weakness in the transmission of the Latin text (there is an additional omission by *homoioteleuton* in Baur's ms. Paris, BNF Lat. 14700 of *conveniunt ... secundum quod* while ms. Bodleian 675 misses the entire section from the first *secundum quod* to *laudabile*).

(15.3) The Latin has *civitatis* in addition to the occurrence of *utilitatem* at the end of the passage. The term is absent from the Arabic but this may well be an authorial intervention by Gundissalinus to qualify the term *utilitas* in line with its first occurrence shortly before (the counterpart of the second occurrence of *naḥ* is absent in Latin as it would have occurred in the missing text).

16. Difference between sciences that agree in subject : case [ba] (*Burhān*, II.7, p. 166.16-19; *De divisione*, p. 131.4-10)

واعلم أن اختلاف العلوم المتفقة في موضوع واحد يكون على وجهين فإنه إما أن يكون أحد العلمين ينظر في الموضوع على الإطلاق والآخر في الموضوع من جهة ما مثل ما أن الإنسان قد ينظر فيه جزء من العلم الطبيعي على الإطلاق وقد ينظر فيه الطب وهو علم تحت العلم الطبيعي ولكن لا على الإطلاق بل إنما ينظر فيه من جهة أنه يصح ويمرض

«Scias autem quod diversitas scientiarum convenientium in uno subiecto est duobus modis. Aut enim una duarum scientiarum speculatur subiectum

<absolute et alia speculatur subiectum> secundum aliquem modum, verbi gratia una enim pars scientiae naturalis tractat de homine absolute et medicina quae est sub scientia naturali tractat de eo sed non absolute; tractat enim de homine secundum quod infirmatur et sanatur».

The passage is part of Avicenna's discussion of the ways in which two sciences that share the same subject may be distinct. The first way is when one science investigates the subject without qualification and the other in one respect, like the case of medicine and the part of physics that deals with the human body and its vegetative and sensitive faculties.

(16.1) The Latin translation is incomplete due to an omission by *homoioteleuton* of the counterpart of the Arabic 'alā l-iṭlāq wa-l-āḥar fī l-mawḍū' after the first occurrence of *fī l-mawḍū* (*subiectum*) most likely linked with the transmission of the Latin translation (*subiectum ... subiectum*). The emendation is required by the sense. In spite of the impossibility of establishing at which stage the error originated, the missing text needs to be supplemented in order to rescue the intelligibility of the Latin. In the absence of any intervention, the current text would fail to account for one of the two cases under consideration, which would be counterintuitive given that the distinction between two cases is introduced in the immediately preceding passage, and illustrated in the subsequent sentence by an example involving two sciences (not just one), one of which investigates the subject without qualification and the other in some respect.

Furthermore, the conjecture is supported by ms. Bodleian 675 which reads *in una* (in agreement with Baur's ms. C) *duarum scientiarum speculatur subiectum absolute et alia speculatur subiectum alio modo*.

17. Difference in sciences that agree in subject: case [bb] (*Burhān*, II.7, pp. 166.19 - 167.10; *De divisione*, pp. 131.10 - 132.7)

وإما أن يكون كل واحد من العلمين ينظر فيه من جهة دون الجهة التي ينظر
الآخر فيها مثل أن جسم العالم أو جرم الفلك ينظر فيه المنجم والطبيعي جميعا
ولكن جسم الكل هو موضوع للعلم الطبيعي بشرط وذلك الشرط هو أن له مبدأ
حركة وسكون بالذات وينظر فيه المنجم بشرط وذلك الشرط أن له كما وأنهما
وان اشتركا في البحث عن كرية ذلك [فلك] الجسم فهذا يجعل نظره من
جهة ما هو كم وله أحوال تلحق الكم وذلك يجعل نظره من جهة ما هو ذو
طبيعة بسيطة هي مبدأ حركته وسكونه على هيئته ولا يجوز أن تكون هيئته

التي يسكن عليها السكون المقابل للفساد والاستحالة هيئة مختلفة في أجزائه فتكون في بعضه زاوية ولا تكون في بعضه زاوية لأن القوة الواحدة في مادة واحدة تفعل صورة متشابهة وأما المهندس فيقول إن الفلك كرى لأن مناظره كذا والخطوط الخارجة إليه توجب كذا فيكون الطبيعي إنما ينظر من جهة القوى التي فيه والمهندس من جهة الكم الذي له فيتفق في بعض المسائل أن يتفقا لأن الموضوع واحد وفي الأكثر يختلفان

«Aut unaquaeque scientiarum tractat de eo uno modo et alia alio modo quemadmodum corpus mundi vel corpus caeli considerant astrologus et naturalis uterque. Sed corpus quod est corpus universi est subiectum scientiae naturalis cum conditione scilicet secundum quod est principium motus ei et quietis essentialiter et est subiectum scientiae astrologicae cum conditione scilicet secundum quod habet quantitatem. Et hae duae scientiae quamvis convenient in inquisitione specialitatis huius corporis, tamen haec speculatur illud secundum quod habens quantitatem et dispositiones quae sequuntur quantitatem; illa vero speculatur illud secundum quod est habens naturam simplicem quae est principium sui motus et suae quietis secundum dispositionem eius. Non potest autem esse dispositio rei ut perveniat in permanentia opposita corruptioni et alterationi et habent diversitatem in suis partibus ita ut in aliqua parte eius sit angulus. Una enim virtus non facit in una materia nisi actionem et dispositionem consimilem. Geometria autem dicit quod caelum sphaericum est. Aspectus enim eius sunt tales et lineae quae perveniunt ad ipsum faciunt debere esse tale quid. Igitur naturalis considerat caelum secundum vires quae sunt in illo; geometria vero considerat illud secundum quantitatem quae est illi. Contingit ergo quod in aliqua quaestionum convenient, eo quod subiectum eorum unum est, et in plerisque differtur».

The passage deals with the second way in which two sciences that share one and the same subject may be distinct, which is when they both investigate the subject under different respects. To illustrate the distinction Avicenna advocates the relation between astronomy and physics. While articulating the context of the distinction, he reasserts the subordination of astronomy to geometry (not to physics), in spite of the fact that the object of investigation both for the part of physics that deals with the structure of the universe (corresponding to the *De caelo*) and for astronomy (as a mathematical science) is the *sphericity* of the universe. The two sciences investigate the latter in different ways, one with respect to physical properties, the other with respect to geometrical relations.

I reproduce the text of [bb] in its entirety. The numerous variant it contains are best understood in the context of the whole passage.

(17.1) In the Latin translation we encounter *corpus quod est* before *corpus universi*, a variant which does not seem to be attested in Arabic but may also be explained as a stylistic choice on Gundissalinus' part to add emphasis.

(17.2) The Latin *et est subiectum scientiae astrologicae cum conditione* does not correspond to the Arabic of 'Afīfī's edition (the text reproduced above), which reads *wa-yanẓuru fīhi l-munağğim bi-šarṭ* («and the astronomer investigates it under a condition»), but rather to the text of Badawī's edition: *wa-mawḏū' al-'ilm al-munağğimī bi-šarṭ* («and the subject of the astronomical science [is] under a condition»). The (different) Arabic text is printed in both editions without variant. 'Afīfī's reading is confirmed by ms. Oxford, Bodleian Pococke 121, mss. Leiden Golius 4 and Golius 84, ms. Istanbul Damad 822, and ms. Cairo Beḥīt 331. I have been unable to locate the origin of Badawī's reading which may presumably derive from one of the additional three manuscripts he used for his edition, namely ms. Paris, BNF Ar. 6527 (*siglum* S), Ar. 6829 (*siglum* B) or ms. Cairo Dār al-kutub 894 (*siglum* Q).

(17.3) The phrase *specialitatis huius corporis* prompts two distinct sets of considerations. First, it raises a flag for the presence of the demonstrative *huius*. The Latin text helps for the identification of an evident mistake on which the two Arabic editions curiously converge. A cursory glance at the manuscript tradition of the Arabic would immediately show that *ḥalak al-ğism* must be emended. The correct reading is uncontroversially *ḍālīka l-ğism*, the object of both sciences being «[the sphericity] of *that* body», i.e., of the body of the universe. Both Arabic editions of the text print *ḥalak* when manuscripts on which they are based unequivocally have *ḍālīka*. What is more, they do so without even signaling *ḍālīka* as a variant in their pseudo-apparatus. The error may be easy to explain, in and of itself, due to the similarity of ذ and ف, but it remains unclear how the two editors could possibly have chosen to ignore the presence of *ḍālīka* in the witnesses on which the editions are based, leaving aside the fact that it is clearly required by the sense⁷¹.

Secondly, in the same phrase, the Latin *specialitas* does not make sense in the context and needs to be emended. The error cannot have originated in the transmission of the Arabic because the words are different (*kuriyya* versus the putative *naw'iyya*) and there seems to be no other straightforward philological

⁷¹ For instance, ms. Cairo Al-Azhar Beḥīt 331 which plays a prominent role for the establishment of the text in both editions. But cf. also mss. Leiden Golius 4 and Golius 84 (allegedly used by Badawī), ms. London British Library Or. 7500 ('Afīfī), and ms. Bodleian Pococke 121 (with the variant *ḥādā*; the manuscript is not used by either edition).

reason to justify something that would correspond to *specialitas*. Furthermore, the term cannot be an innovation introduced by the translator, as it is hard to imagine Gundissalinus replacing *sphericitas* with *specialitas*, when the whole passage is about the fact that the universe has a spherical shape and this is what the two sciences have in common. The error must therefore have occurred at some point in the transmission of the Latin translation, which is not unfathomable in light of the fact that an abbreviated form for the spelling *sp[h]ericitas* may have been easily misread by a copyist as *specialitas*. This fact, along with the sense of the argument, seems to justify beyond reasonable doubt the necessity of an intervention in favor of *sphericitatis huius corporis* (while at the same time restoring the correct text *kuriyyat dālīka l-ġism* in the Arabic).

(17.4) The use of *dispositio* for both *ḥāl* (pl. *aḥwāl*) and *hay'a* is noteworthy. Gundissalinus' effort to maintain lexical consistency in the case of *hay'a* (*dispositio* was used earlier for this term in the chapter in the correct sense of 'disposition' or 'state') happens here to betray the sense of the passage and to undermine the strength of Avicenna's point. This becomes clear in connection with the Arabic use of *'alā hay' atihī*, which in this context means 'according to its shape' (contrary to the Latin *secundum dispositionem eius*). Physics investigates the body of the universe in connection with the principle of its (circular) motion and with respect to its sphericity, while astronomy (as a science subordinated to geometry) investigates the body of the universe as a purely geometrical object with respect to its 'quantitative' features.

(17.5) The point of the next sentence hinges, among other things, on a correct understanding of *hay'a* as 'shape' rather than 'disposition'. Avicenna is discussing the relation between motions and the sphericity of the universe from a physical standpoint. He argues that the shape of the universe cannot have (i) a lack of uniformity in its parts, and (ii) angles in some parts and not in others. The Latin translation does not reflect quite accurately the sense of the Arabic in the expression *et habent diversitatem* for *hay'a muḥtalifa* (it might come a little closer to the Arabic if we read *habeat* (for *habent*) in tandem with *perveniat* and with *dispositio rei* as subject). Alternatively, one could also have expected the predicate of *non potest esse dispositio rei* to be *habens diversitatem*. The whole sentence seems to have a garbled syntactic construction (even though the first part of the *ut* clause may be an intentional choice to render the relative clause introduced in Arabic by *allatī*). What the Latin fails to convey is that the shape of the body of the universe (*hay' atuhū*) cannot be, in virtue of its peculiar motions, a shape that admits of differentiation in its parts (*hay'a muḥtalifa fī aḡzā' ihī*).

(17.6) The Latin also omits a part of the characterization of point (ii). As can be gleaned from the Arabic, Avicenna's contention is that the shape of the universe is not simply such that it cannot have angles in one of its parts. Rather, it is such that it cannot have angles in one part and not in others, which is a stronger requirement for regular uniformity (ultimately related to the kinds of motions and powers acting on it). The phrase *wa-lā takūnu fī ba'ḍihī zāwiya* may easily have fallen by *homoiteleton* in the transmission of the Arabic (in fact it is missing from ms. Istanbul Damad 822), and not intervening in this case may be a prudent choice, even if the discrepancy should certainly be recorded in a future edition of the Latin. Nothing prevents us from imagining that an omission by *homoiteleton* might have equally easily occurred in the Latin (*angulus ... angulus [et in aliqua parte eius non sit angulus]*) but given that the omission is attested in the Arabic tradition, the proposed solution seems to be more plausible.

(17.7) The interesting textual complexities starting with the previous argument continue with the next sentence, which offers another remarkable example of the relation between the Latin translation and one particular branch in the transmission of the Arabic text. After claiming that the shape of the universe must be uniform and cannot have angles in some parts and not in others, Avicenna offers as a justification the fact that one and the same power acting on one and the same matter produces a similar result. The idea is phrased in different terms by different witnesses. 'Afīfī's text (reproduced above)⁷² has *li-anna l-quwwata al-wāḥidata fī māddatin wāḥidatin taf'alu ṣūratan mutaṣābihan* which does not correspond to the Latin text *una enim virtus non facit in una materia nisi actionem et dispositionem consimilem*. The latter is isomorphic in structure and vocabulary to Badawī's text *li-anna l-quwwata l-wāḥidata innamā taf'alu fī māddatin wāḥidatin fī 'lan wa-hay' atan mutaṣābihatan*. This variant is registered in note by 'Afīfī as the text of ms. Istanbul Damad 824 (*siglum S*, which I have been unable to verify) and is independently attested by ms. Leiden Golius Or. 4 albeit in a rather garbled passage that seems to combine the two versions *li-anna l-quwwa l-wāḥida innamā taf'alu fī māddatin wāḥidatin fī 'lan wa-hay' atan mutaṣābihatan fī māddatin wāḥidatin yaf'alu ṣūratan mutaṣābihatan*. In this connection, the relation between the Latin translation and the family of manuscripts to which ms. Istanbul Damad 824 and ms. Leiden Golius 4 belong undoubtedly deserves further attention.

(17.8) Two occurrences of *geometria* correspond in Arabic to *al-muhandis* 'the geometer', with loss of symmetry with respect to the parallel constructions *naturalis-aṭ-ṭabī'ī* and *astrologus-al-munağğim*.

⁷² In line with ms. Leiden Golius 84, ms. Bodleian Pococke 121 and ms. Istanbul Damad 822.

(17.9) The Latin *igitur naturalis considerat caelum secundum vires quae sunt in illo* neglects *innamā* (*aṭ-ṭabī ī innamā yanzuru mina l-quwā*) and adds *caelum*. The Arabic text is printed without variant by the two editions and is attested by independent witnesses such as ms. Bodleian Pococke 121. The introduction of *caelum* may well be Gundissalinus' own innovation, as the Arabic *yanzuru* here comes unaccompanied (contrary to what happens in the rest of the chapter) by *fī* and its object. The translator may have felt the need to supply the missing object. The absence of a counterpart to *innamā* may simply be due to a material omission in the model used by the translator. By contrast, assuming that the error originated in the transmission of the Latin text would be a more expensive option, as *innamā* is usually rendered by Gundissalinus with a *non ... nisi* construction.

18. Sciences that share in principles: the exclusion of a trivial case (*Burhān*, II.7, p. 167.12-14; *De divisione*, p. 132.10-14)

والمشتركة في المبادئ فلسنا نعني بها المشتركة في المبادئ العامة لكل علم بل
المشتركة في المبادئ التي تعم علومها ما مثل العلوم الرياضية المشتركة في أن
الأشياء المساوية لشيء واحد متساوية

«Sed per communicantes in principiis non intelligimus communicantes in principiis communibus omni scientiae sed communicantes in principiis in quibus communicant aliquae scientiae sicut <scientiae mathematicae communicantes> in hoc quod quaecumque sunt aequalia eidem et inter se».

The list of ways in which two sciences may share in principles excludes the case of common axioms. Avicenna illustrates this with the standard principle that when equals are subtracted from equals, the remainders are equal.

(18.1) The use of this example would be misleading if the text of the Latin translation were correct, as the latter omits an indispensable qualification between *sicut* and *in hoc quod*. The correct sense is found in the Arabic *miṭla l-'ulūm ar-riyāḍiyya l-muštariḳa fī anna*, which restricts the principle to the range of the mathematical sciences. The above solution is conjectural.

19. Sciences that share in principles: case [1.2] (*Burhān*, II.7, p. 167.15-18; *De divisione*, p. 132.16-20)

وإما أن يكون المبدأ للواحد منهما أولاً وللثاني بعده مثل أن الهندسة وعلم المناظر
بل الحساب وعلم الموسيقى يشتركان في هذا المبدأ لكن الهندسة أعم موضوعاً

من علم المناظر فلذلك يكون لها هذا المبدأ أولاً وبعدها للمناظر وكذلك حال
الحساب من الموسيقى

«Aut principium unius eorum erit prius et alterius erit posterius, sicut geometriae et scientiae de aspectibus quae est per numerum et scientiae musicae quia communicant in hoc principio. Geometria vero est communioris subiecti quam scientia de aspectibus. Similiter est dispositio arithmeticae et musicae».

Avicenna presents here the case of sciences that, while having principles in common, are such that in one the principle is prior and in the other posterior. The case is exemplified by the pairs geometry-optics and arithmetic-music.

(19.1) The relation between the Arabic text of the two editions (which is identical and without variants) and the Latin text is not entirely clear. It is equally possible that something may be missing from the Arabic (perhaps *li-annahumā*) as well as from the Latin, and it remains doubtful whether Gundissalinus is correcting the text or translating from a better model.

(19.2) The Arabic *fa-li-dālīka yakūnu lahā hādā al-mabda' awwalan wa-ba'dahā li-l-manāẓir* is omitted in the translation, most likely due to *homoioteleuton* (*al-manāẓir fa-li-dālīka/li-l-manāẓir wa-ka-dālīka*), and may not justify an emendation in the Latin, even if the sense of the passage would gain significantly from it. The current Latin text expresses Avicenna's point in an incomplete way: since the subject of geometry is more general than the subject of optics, a principle may pertain to the former in a primary sense, and to the latter in a secondary sense. Badawī's text has *lahū ... wa-qablahū*.

20. Sciences that share in subjects: case [3.2] (*Burhān*, II.7, p. 168.13-15; *De divisione*, p.133.17-20)

وإما أن يكون لكل واحد من موضوعي علمين شيء خاص وشيء يشارك فيه
الآخر كالطب والأخلاق

«Vel unicuique subiectorum duarum scientiarum est aliquid proprium et aliquid in quo communicat cum altero sicut medicinae et ethicae in sanando sed una sanat corpus et alia animam».

The last passage under consideration concerns the second way in which two sciences may be distinct in virtue of their subjects, namely when they partially overlap, as in the case of medicine and ethics.

(20.1) The Latin adds the qualification *in sanando sed una sanat corpus et alia animam*, for which no counterpart is to be found in the Arabic editions. The text may be a gloss added by Gundissalinus to explain more in detail the difference between the case of medicine and ethics, along the lines of what Avicenna says at the beginning of the chapter (*Burhān*, II.7, p. 162.8-9, *De divisione*, pp. 124.25 - 125.3). Or, alternatively, it could reflect a genuine stage of the transmission of the Arabic text currently unattested.

CONCLUSION

The motivation behind this article was to extend distinct lines of inquiry that originated, with different purposes and at different times, with two pioneering articles: one by H. Hugonnard-Roche on the relation between Gundissalinus' *De divisione philosophiae* and Avicenna's *Burhān*, II.7; the other by J. Janssens on the constitution of Latin text and the need for a new critical edition of the *De divisione*.

The first task required a new and more comprehensive analysis of Avicenna's classification of the sciences, which has brought to the surface yet another episode of systematic philosophy in the context of *Burhān* that perfectly fits in the structure of his metaphysics and epistemology. The division of the sciences is based on ontological relations and consistently developed according to Avicenna's expanded model of *per se* predication and the way in which scientific subjects are determined. The relations exemplified by canonical examples that are in some cases already to be found in *An. Post.* are articulated in a systematic framework and justified at every turn by an underlying network of metaphysical relations between subjects and properties.

The second task required a more extensive comparative analysis of the Arabic and Latin texts. What I offer here is a comprehensive take on the chapter in its entirety, highlighting the main junctures and tensions. I do not intend to advance any pretense of exhaustiveness even though this contribution aims to offer a digest of the most relevant points and difficulties, especially with regard to the Latin text. A great many interesting issues concerning syntax and vocabulary, idiosyncratic aspects of the translation, as well as minor discrepancies have often been omitted from the discussion in order to let the most relevant discrepancies stand out more evidently.

It is my hope that the few remarks above will be useful for the establishment of new critical editions of the Latin as well as of the Arabic text. But perhaps more importantly, in spite of the selective focus of this contribution, I hope it offers further convincing evidence that both texts desperately need one.

ABSTRACT

Avicenna's Kitāb al-Burhān, II.7 and its Latin Translation by Gundissalinus: Content and Text

The article discusses the relationship between chapter II.7 of Avicenna's (d. 1037) *Kitāb al-Burhān* (*Book of Demonstration*) and its 12th-century Latin translation by Dominicus Gundissalinus (fl. ca 1150), famously incorporated by the latter as an independent section in his own *De divisione philosophiae*. The text deals with the division of the sciences and their mutual relations, and is the only part of Avicenna's *Burhān* — his most extensive treatment of Aristotle's *Posterior Analytics* — ever to be translated into Latin.

I shall examine different ways in which philosophical content and text relate to each other in the Arabic and in the Latin, focusing in particular on emendations, textual transmission, style of translation, and lexical usage.

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GAIA CELLI

The Rhetoric Section of the *Kitāb al-Šifā'*: Hermannus Alemannus' Latin Translation and the Arabic Witnesses*

1. HERMANNUS ALEMANNUS AND HIS LITERARY ACTIVITY

Hermannus Alemannus was active as a scholar during the 13th century, within the territories of the Crown of Castile¹. He was probably bishop of Astorga (in León) from 1266 to 1270 — the year of his death — and he is mainly known for having translated from Arabic to Latin philosophical texts concerning Aristotle's ethics, rhetoric and poetics. He began translating Averroes' *Middle Commentary* on *Poetics* spurred by the Bishop of Toledo and by the chancellor of the King of Castile. After achieving this work by 1256, with the goal of making all the sections of the Alexandrian *Organon* available to the Latin public, Hermannus Alemannus undertook to prepare a Latin version of Aristotle's *Rhetoric* from Arabic, again for the crown of Castile. In this context, he also translated some short sections of Fārābī's *Kitāb al-Ḥiṭāba*², or *Book of the Rhetoric*, and of Averroes' *Middle Commentary* on the *Rhetoric*, together with two excerpts from the rhetoric section of Avicenna's *Kitāb al-Šifā'*, or *Book of the Cure* (II.2, 73, 7 - 75, 15 and IV.1, 206, 8 - 212, 16 of Sālim's edition)³, in order to substitute or explain difficult sections of Aristotle's text⁴. Since the quotes from other sources are finalized to explaining Aristotle's text and not to the divulgation of those texts as such, Hermannus' attitude is sometimes rather paraphrastic when dealing with them.

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¹ On Hermannus' biography, see G. H. LUQUET, *Hermann l'Allemand* († 1272), « *Revue de l'Histoire des Religions* », 44, 1901, pp. 407-422.

² This subject is discussed in depth by F. Woerther in her contribution to this volume.

³ M. S. SĀLIM, *Ibn Sīnā, Al-Šifā', la logique, VIII, Rhétorique* (Al-Ḥaṭābah), Imprimerie Nationale, Il Cairo 1954.

⁴ The nature of these difficulties is discussed in W. F. BOGESS, *Hermannus Alemannus' Rhetorical Translations*, « *Viator* », 2, 1970, pp. 227-250, in F. WOERTHER, *Les citations du Commentaire moyen à la Rhétorique d'Aristote par Averroès dans la traduction arabo-latine de la Rhétorique d'Aristote par Hermann l'Allemand*, « *Mélanges de l'Université Saint-Joseph* », 63, 2010-2011, pp. 323-359, and in G. CELLI, *Some Observations about Hermannus Alemannus' Citations of Avicenna's Book of the Rhetoric*, « *Oriens* », 40/2, 2012, pp. 477-513.

The goal of this contribution is to find out at which degree the textual relationship between the Arabic and the Latin witnesses of Avicenna's rhetorical work can be established and described, since better knowledge of the links between Hermannus' Arabic source and other Avicennian Arabic manuscripts would be, at the same time, very useful in editorial terms and extremely informative as far as the history of our text is concerned. These questions will be dealt with directly in sections 5 and 6 of this paper. Before addressing them, I will provide some preliminary information about the witnesses of the *Kitāb al-Ḥiṭāba*, both in Latin (section 2) and in Arabic (section 4), while in section 3 I will describe the ways in which Hermannus acts on his source text.

2. HERMANNUS' WITNESSES

We know about Hermannus' yet unedited translation thanks to three manuscripts, namely ms. Paris, BNF, latine 16673, ms. Toledo, Biblioteca Capitular, 47.15, and ms. Florence, Biblioteca Medicea Laurenziana, Plut. 90 Sup. 64, even if the latter copy only contains the citations from Averroes, to the exclusion of quotes from Fārābī and Avicenna, and of Aristotle's text itself. In Aegidius Romanus' commentary on Aristotle's *Rhetoric*, which mainly relies on Moerbeke's Greek-Latin translation⁵, there are short quotes from Hermannus' text as well, regularly drawn from the part of the translation regarding Aristotle rather than from his commentators cited by the translator⁶.

Ms. Paris, BNF, latine 16673 is a parchment codex dating to the 13th century. It was penned in gothic letters by two different copyists — the first active up to 61r and the second from 65r — and it is made up of 172 folia divided in two columns each. It contains no corrections, but sporadic glosses appear in the section that contains Hermannus' *Rhetoric*. This text — mistakenly named *Averroes in Rhetoricam* by *Aristoteles Latinus* — covers folia 65r-147r. The manuscript also preserves *Rhetorica Vetus* (ff. 1r-61r), a list of Greek words found in this text (f. 61v), and Averroes' *Middle Commentary* on the *Poetics*, again translated by Hermannus. On the verso of the last folio we can read: «Explicit Deo gratias

⁵ The first Greek-Latin translation of the *Rhetoric*, from an unknown author and rarely copied, goes back to the beginning of the 13th century, while the much more famous version by William of Moerbeke is dated 1269. According to R. Kassel's stemmatic reconstruction, the anonymous version rests entirely within the γ branch, while Moerbeke's text derives both from γ and from Δ. Cfr. ARISTOTLE, *Aristotelis ars rhetorica*, ed. R. KASSEL, De Gruyter, Berlin 1976, and G. DAHAN, *L'entrée de la Rhétorique d'Aristote dans le monde latin entre 1240 et 1270*, in I. ROSIER-CATACH, G. DAHAN eds., *La Rhétorique d'Aristote. Traditions et commentaires de l'antiquité au XVII^e siècle*, Vrin, Paris 1998, pp. 65-86.

⁶ Cfr. C. MARMO, *Retorica e poetica*, in L. BIANCHI ed., *La filosofia nelle Università. Secoli XIII e XIV*, La Nuova Italia, Firenze 1997.

anno Domini millesimo ducentesimo quinquagesimo sexto, septimo decimo die Marcii, apud Toletum, urbem nobilem». *Aristoteles Latinus* refers this statement to the translation of the commentary on the *Poetics* rather than to the copying of the codex, which goes back to the 13th century, as stated above⁷.

Ms. Toledo, Biblioteca Capitulare, 47.15 is a parchment codex dating to the 13th century, made up of 160 folia followed by two blank ones. It is a very large manuscript, its pages are organized on three columns and two different copyists penned sections ff. 1r-146v and ff. 147r-160. There are no marginal notes and the upper third of each page is hard to read because it was damaged by humidity. The translation of the *Rhetoric* covers folia 36r-53r, but many more texts are included in the codex. They vary in subject, but they are all philosophical in nature. Quite a few of them share the characteristic of being Aristotelian, translated from Arabic, or devoted to rhetoric subjects. The *Rhetorica Vetus* occupies folia 25r-35v⁸.

Ms. Florence, Biblioteca Medicea Laurenziana, Plut. 90 Sup. 64⁹ is a paper codex going back to the 15th century, in chancery hand, made up of 106 folia preceded by 5 blank folia. Two copyists have been working on it. In the margins and in the interline there are *glossae* and *scholia* inserted by a hand slightly younger than the copyists'. It does not contain the whole of Hermannus' translation of the *Rhetoric*, but only quotes from Averroes taken from chapters I.1-5, which cover folia 105r-106v. The manuscript also preserves the Latin version of Aristotle's *Rhetoric* prepared by George of Trebizond (ff. 1r-97r) and some *summaria* (97r-104v)¹⁰.

Aegidius Romanus' commentary on the *Rhetoric* is still unedited, but the edition printed in Venice in 1515 is easily available thanks to a reprint¹¹. However this witness is not — strictly speaking — pertinent to our task, since, at the best of my knowledge, Aegidius' quotes from Hermannus' version are always taken from the text of Aristotle's *Rhetoric* translated into Latin, and never from the philosophical quotes that are added from Averroes, Fārābī, and Avicenna.

When discussing Hermannus' text, I act on the presumption that the Paris and the Toledo manuscripts shared a common ancestor, for there are passages

⁷ Cfr. G. LACOMBE, A. L. BIRKENMAJER, M. DULONG, E. FRANCESCHINI, L. MINIO-PALUELLO, *Aristoteles Latinus*, Cambridge University Press, Cambridge 1955, I.706.

⁸ Cfr. LACOMBE ET AL., *Aristoteles Latinus* cit., II.1243.

⁹ On this witness, see BOGGESE, *Hermannus Alemannus*' cit., and B. SCHNEIDER, *Rhetorica: Translatio anonyma et Guillelmi*, Brill, Leiden 1978.

¹⁰ Cfr. LACOMBE ET AL., *Aristoteles Latinus* cit., II.2343.

¹¹ AEGIDIUS ROMANUS, *Commentaria in Rhetoricam Aristotelis*, Venice 1515, Unverändert Nachdruck, Minerva G.M.B.H., Frankfurt 1968.

where the text that they both preserve cannot be right¹². Moreover, the fact that they both have individual mistakes means that none of them is *eliminandus* in the reconstruction of the text. I am incapable of making reliable assumptions on the stemmatic position of Aegidius' commentary vis-à-vis Hermannus' translation, but, as said above, this could not be a relevant element when discussing Avicennian quotes in Hermannus' *Rhetoric*. On these premises, whenever I quote Hermannus translation of Aristotle's and Avicenna's *Rhetoric*, I make use of the text that I personally assembled by collating its witnesses. I wish to highlight that this version of the Latin text is, by all points of view, provisional: my goal is simply to provide the reader with a meaningful text and some information about the wording of its witnesses. For reference purpose, I always quote page and line number of the Paris manuscript. Whenever I adopt a reading from the Toledo manuscript, I specify it.

3. HERMANNUS AND AVICENNA

In Hermannus' version of Aristotle's *Rhetoric*, the translations from Fārābī¹³, Avicenna and Averroes are not finalized at divulgating said sources for their own sake, but rather at explaining Aristotle's text. Accordingly, Hermannus' attitude is slightly more paraphrastic when dealing with them than when dealing with Aristotle himself. More specifically, in the first chapters of the first book of the *Rhetoric* Hermannus uses Averroes as a source of commentary notes for complex Aristotelian passages. In the later, more example-intensive books, it is Avicenna that will be employed, once to explain a difficult Aristotelian section, and once to substitute for Aristotle's text altogether. It is Hermannus himself that describes examples and foreign words in Aristotle's Arabic text as the main reason for which he was forced to enlist Avicenna's aid¹⁴. This approach seems quite sensible, if we consider the fact that Averroes' work on the *Rhetoric* is indeed structured as a commentary, aimed at making Aristotle's meaning easier to grasp, and that it is divided into Aristotelian *lemmata* and their explanation, while Avicenna's treatise, as a part of the *Kitāb al-Šifā'*, is built as a self-sufficient

¹² See for example the case of *decentia* (to be emended in *decentiam*) and of *significatum* (possibly to be emended in *dictio*) at paragraph 5.4 of this paper, and of *munus* and *munusculum* (to be emended in *minus* and *minusculum* respectively) at paragraph 5.6.

¹³ On quotes from Fārābī, see F. WOERTHER, *Les traces du Grand Commentaire d'al-Fārābī à la Rhétorique d'Aristote dans la traduction arabo-latine de la Rhétorique par Hermann l'Allemand*, « Bulletin de Philosophie Médiévale », 54, 2012, pp. 137-154, and her contribution to the present volume.

¹⁴ This statement is made just before his second Avicennian quote, at 128ra11-16 of the Paris manuscript: « in hoc passu tot inciderunt exempla extranea et greca (grata PT) vocabula quod nullum nobis consilium fuit prosequendi textum Aristotilis. Unde coacti fuimus (fuerimus P) sequi illud quod Avicenna de hoc passu excerpterat et posuerat in libro suo Aschipse ».

text. On the other hand, as a reworking of the original, it was perfectly capable of substituting for it: this, after all, is what actually happened in the Arabic philosophical tradition after Avicenna's death¹⁵.

On four occasions, Hermannus also informs the reader that he is going to omit an especially troubling passage, as a last-resort tool to cope with the difficulties of the Greek-Arabic translation of Aristotle's *Rhetoric*¹⁶.

The following table sums up Hermannus' citations from Averroes and Avicenna, together with Hermannus' omissions. I also note which Greek passages are commented upon, and — between brackets — which passages are intentionally left without translation. For immediate reference purpose, I quote the pages and lines of the Paris manuscript for Hermannus' version, Bekker's numbers for Aristotle's Greek text, Sālim's edition for Avicenna, and Aouad's edition for Averroes' *Middle Commentary*¹⁷.

ARISTOTLE, <i>Ars Rhetorica</i> I		
65vb17-66ra3	I, 1, 1354a1-4	Ave. MCR, 1.1.1 (p. 1.6-14), and 1.1.2 (p. 2.4-5, and 2.7-8)
66vb15-67ra4	I, 1, 1354b22-28	Ave. MCR, 1.1.9 (p. 5.10-22)
67rb28-67va3	I, 1, 1355a18-20	Ave. MCR, 1.1.13 (pp. 8.8 and 8.11-13)
67va11-18	I, 1, 1355a20-24	Ave. MCR, 1.1.14 (p. 8.14-16)
67vb11-13	I, 1, 1355a29-32	Ave. MCR, 1.1.17 (p. 9.12-13)
72rb21-72va8	I, 4, 1359b2-18	Ave. MCR, 1.4.4 (pp. 32.23-33.11)
72vb7-10	I, 4, 1359b23-29	Ave. MCR, 1.4.6 (p. 34.10-11)
75rb (marginal note)	I, 5, 1361b27-34	Ave. MCR, 1.5.24 (p. 46.10)
75rb (marginal note)	I, 5, 1361b27-34	Ave. MCR, 1.5.24 (p. 46.9)
75rb20-75va4	I, 5, 1361b39-1362a12	Ave. MCR, 1.5.26 (pp. 46.19-47.3)

¹⁵ Hermannus himself addresses his activity as a translator of the *Rhetoric* and its commentaries in two cases. See CELLI, *Some Observations* cit., pp. 478-483.

¹⁶ These passages too have been pointed out by BOGGESE, *Hermannus Alemannus'* cit., p. 240.

¹⁷ See AVERROES, *Commentaire moyen à la Rhétorique d'Aristote. Édition critique du texte arabe et traduction française*, ed. M. AOUAD, Vrin, Paris 2002.

75vb8-18	I, 5, 1362a12-14	Ave. MCR, 1.5.27-28 (p. 47.15-19)
76rb7-12	I, 6, 1362a29-31	Ave. MCR, 1.6.6 (p. 49.16-18)
76rb27-28	I, 6, 1362b5-1362b10	Ave. MCR, 1.6.9 (p. 50.5-6)
77va11-78va19	I, 6, 1363a17-1363b4	Avi. KH, II.2 (pp. 73,7-75,15)^a
77va (marginal note)		Ave. ^b MCR, 1.6.18-19 (pp. 53,6-54,5)
92vb12-18,	(I, 15, 1375b33-1376a8)	xxx
ARISTOTLE, <i>Ars Rhetorica</i> III		
128ra17-130rb28	(III, 2-4, 1405a31-1407a18)	Avi. KH, IV.1 (pp. 206,8-212,16)^c
134va24-28,	(III, 9, 1410a9-1410a20)	xxx
135va24-b7	(III, 10, 1411a4-1411b10)	xxx
143ra18-20	(III, 16, 1417a13-1417a16)	xxx

^a See paragraphs 3.1, 5.1 and 5.2 of the present contribution.

^b As Boggess points out, the manuscripts mistakenly state that this passage is taken from Avicenna as well.

^c See paragraphs 3.2, 5.3, 5.4, 5.5, 5.6, and 5.7 of the present contribution.

We can see at a glance that, although quotes from Averroes are much more frequent (and grouped in *Rhetoric* I), the Avicennian citations are much longer, so that, on the whole, Hermannus translated much more Avicenna than Averroes. The extension of the Latin text available to us for Avicenna's *Kitāb al-Ḥiṭāba* gives some ground to the hope of establishing genetic relationships between Hermannus' source and the Arabic manuscripts of this treatise. The first Avicennian citation refers to *Rhet.*, I, 6 but is located in *Kitāb al-Ḥiṭāba*, II.2, for in the Arabic commentary Aristotle's first book is divided into two separate treatises, the first one devoted to the general principles of rhetoric, and the second one to the three rhetorical genders, judiciary, deliberative and encomiastic. Likewise, the second Avicennian citation stems from a section of IV.1, but mirrors Aristotle III, 2-4, where stylistically appropriate words are discussed. I will analyze some textual peculiarities of the first quote from Avicenna (Ari. *Ars Rhetorica*, I, 6, 1363a17-1363b4/ Avi. *Kitāb al-Ḥiṭāba*, II.2, pp. 73, 7 - 75, 15) at paragraphs 5.1 and 5.2 of this contribution, while the second Avicennian quote (Ari. *Ars Rhetorica*, III, 2-4, 1405a31-1407a18/ Avi. *Kitāb al-Ḥiṭāba*, IV.1, pp. 206, 8 - 212, 16) will be examined at paragraphs 5.3, 5.4, 5.5, 5.6, and 5.7.

3.1. Hermannus' First Avicennian Quote

The first quote from the *Kitāb al-Šifā'* (II.2, pp. 73, 7 - 75, 15 of Sālim's edition) encompasses a citation from Avicenna, one from Averroes, and some introductory words by Hermannus himself. Unlike what happens for the second Avicennian quote (*Kitāb al-Ḥiṭāba*, IV.1, pp. 206, 8 - 212, 16), here Aristotle's text was not omitted, possibly because in this case Hermannus had no problem with its examples, but rather with the general sense of the passage. This is what he states while introducing the citation:

Ms. Paris, BNF, Latine 16673, 77ra15-22:

«Dixit translator: In hoc passu invenimus textum Aristotelis vel ita corruptum, vel decurtatum, vel forte in se obscurum quod sententiam plane intelligibilem ex eo elicere non potuimus. Unde visum fuit verbum ex verbo transferre et post ipsum ad eius elucidationem textum Avi/scenne ex libro suo Asschiphe subiungere usque ad finem capituli».

Hermannus is stating that the Arabic text is so hard to understand that he is forced to transpose it word by word and to add Avicenna's text *ad eius elucidationem*. This could also serve as a motive for the contemporary insertion of the note from Averroes, which is not announced by Hermannus¹⁸.

Rhet., I, 6 is part of Aristotle's discussion of deliberative rhetoric. At the beginning of I, 4 (in 1359a30-b1), Aristotle establishes that the topics worth discussing in terms of deliberative rhetoric concern good and bad things whose obtainment depends on our behavior. Chapter four then analyzes those good and bad things that are of a political nature (1359b2-1360b3), while chapter five discusses happiness and its parts, as they are the goal of deliberation (1360b4-1362a14). Finally, chapter six examines the goal of deliberation in terms of goodness and usefulness, for this is the reference point employed by deliberating

¹⁸ Still, if we consider the subjects addressed concomitantly by Avicenna and Averroes, we find out that the only relevant passages are those about Homer as someone who knew how to remunerate both friends and enemies through the rhetorical devices of praise and blame. On the one hand, this passage seems to deserve particular attention inasmuch as it offers a specifically rhetorical way in which gratitude should be expressed. On the other hand, Hermannus must have found the Homeric example both puzzling and interesting, so that Averroes' passage, which gives little information about historical details, did not seem to him enough to clarify it and Avicenna's words had to be added. The idea that in his first citation from the *Kitāb al-Šifā'* Hermannus was chiefly concerned with Avicenna's words about Homer is strengthened by the fact that these are the lines on which the translator acts most intrusively. I discuss this subject in more detail in CELLI, *Some Observations* cit., where I also offer a provisional text of Hermannus translation of the Aristotelian, Avicennian and Averroistic passages.

people (1362a18-20). Single good things on which there is general agreement are then treated (1362b10-28). For good things that are not universally recognized, some individuation criteria are suggested: for example, that which is the opposite of a bad thing, or the opposite of what is desired by our enemies, are often a good thing (1362b29-37). The passage that reportedly stumps Hermannus explains that good things are often those that are appreciated by valuable people, those that take place in a preferred way, those easily obtained, and those desired by each one (1363a17-b4).

The structure of *Kitāb al-Ḥiṭāba*, II.2 resembles that of *Rhet.*, I, 6 inasmuch as its first section (pp. 64, 11 - 69, 14 in Sālim's edition) is devoted to good things that are recognized by everyone, while its second section (pp. 69, 15 - 75, 14 in Sālim's edition) analyzes more subjective criteria. However, the Avicennian and Averroistic passages quoted by Hermannus focus strongly on rewards for benevolent and malicious acts, which are not addressed at all in Aristotle's text¹⁹. The citation from Avicenna runs to the end of his chapter II.2, while the quote from Averroes is much shorter (1.6.18-19 or pp. 53, 6 - 54, 5 in Aouad's edition) and strictly focused on benevolence and its reward. The narrow scope of the citation from Averroes leads me to think that the passage Hermannus could not understand actually was 1363a16-24, in which it is stated that subjective criteria for recognizing a good are the fact that it is appreciated by valuable people and that it is easy to obtain.

3.2. Hermannus' Second Avicennian Quote

The second Avicennian citation, beginning in 128ra of the Paris manuscript, analyzes metaphors, periphrasis, diminutives, stylistic coldness, and comparisons. Unlike the previous case, here the Aristotelian text for III, 2-4 is completely substituted by Avicenna's words. At this point as well, Hermannus introduces the quotation with some explanatory phrases:

Ms. Paris, BNF Latine 16673, 128ra11-16:

« In hoc passu tot inciderunt exempla extranea et greca (grata PT) vocabula quod nullum nobis consilium fuit prosequendi textum Aristotilis. Unde coacti fuimus (fuerimus P) sequi illud quod Avicenna de hoc passu excerpterat et posuerat in libro suo Aschipse ».

¹⁹ As J. Watt explains, this is probably due to the translation of τιμωρία (1363a26) as *mukāfa`a*, 'requital, reward' (p. 32.5 ed. Lyons). See BAR HEBRAEUS, *Aristotelian Rhetoric in Syriac. Barhebraeus, Butyrum Sapientiae, Book of Rhetoric*, ed. J. W. WATT, in H. DAIBER, R. KRUK eds., *Aristoteles Semitico-Latinus*, Brill, Leiden - New York 2005, 2.3.7-8, p. 308.

Hermannus could not translate Aristotle's Arabic version because of the many examples and Greek words it contained²⁰. This is also the main difficulty Arabic commentators faced in dealing with the *Rhetoric*²¹, and the reason put forward by the translator for omitting the four Aristotelian passages listed in my table²². Hence, omission could be regarded as Hermannus' default solution for passages made unclear by the many references to Greek culture. However, while all the sections listed in my table were tolerably short and their absence did not prevent the global understanding of Aristotle's text, the problematic passage outlined in 128ra11-16 covers as much as three chapters of the *Rhetoric*. By merely leaving it out of the Arabic-Latin translation, therefore, Hermannus would have faced a structural problem, for the whole Aristotelian discussion of the stylistic choice of words would have been missing. Hence the extraordinary decision of substituting it with a commentator's text. It will not be hard to see why Hermannus sought an explanation for Aristotle's examples in Avicenna's *Kitāb al-Ḥiṭāba* rather than in Averroes' *Middle Commentary* if we follow S. Stroumsa's discussion of the indifference shown by Averroes for Greek examples, literary references, and technical terminology in his writings on rhetoric and poetics, which very much differs from Avicenna's systematic attempt to offer an Arabic explicative equivalent for most of them²³.

²⁰ The anonymous Arabic translator's approach to this kind of difficulties is discussed in U. VAGELPOHL, *Aristotle's Rhetoric in the East*, Brill, Leiden - Boston 2008, p. 206.

²¹ Hermannus states it in his prologue to the translation of the *Rhetoric*: ms. Paris, BNF Latine 16673, 65rb4-13: «Nec miretur quisquam vel indignetur de difficultate vel quasi ruditate translationis, nam multo difficilior et rudior ex greco in arabicum est translata. Ita quod Alfarabius, qui primus conatus est ex rethorica aliquem intellectum glosando elicere, multa exempla greca propter ipsorum obscuritatem pertransiens derelinquit et propter eandem causam multa dubie exposuit et, ut Avicenna et Avenroed estimant, propter hanc etiam causam glosam usque ad finem negotii non perduxit».

²² Here are Hermannus' explanations for his Aristotelian omissions. Ms. Paris, BNF Latine 16673, 92vb12-18: «Dixit translator: circa hunc locum plures scribebantur testes et exempla suorum testimoniorum que propter errorem antiquum scriptorum ita confusa fuerunt in omnibus exemplaribus quod non poterat haberi consilium ad ea transferendum. Ideoque fuerunt relicta». 134va24-28: «Sermo translatoris: Plura talia exempla ad idem facientia quia grecam sapiebant sententiam non multum usitatam latinis dimissa sunt et subsequitur quasi conclusio autoris». 135va24-b7: «Inquit translator: Hic plura exempla dicte rationis confirmativa dimisit Ibiniscena in suo Aschipse et Avenroed in sua determinativa expositione huius libri quia penitus grecam sententiam protendebant nec videbatur eis quam magnam habebant utilitatem in arabico eloquio. Hac quoque de causa ego dimisi ipsa. Qui autem magnum habebant auditorium per ipsa volentes in latino via procedere rethoricandi?». 143ra18-20: «Et inducat probationem ad hoc exemplum notum in greco quemadmodum processit talis in causa contra talem».

²³ See S. STROUMSA, *Avicenna's Philosophical Stories: Aristotle's Poetics Reinterpreted*, «Arabica», 39, 1992, pp. 183-206.

If citations from commentators and omissions of troubling Aristotelian passages are the tools employed by Hermannus when dealing with the Arabic translation of the *Rhetoric*, we still don't know how he intervenes on Avicenna's text. The second Avicennian quote, being the longest, provides the best basis for answering this question. I suggest that his activity revolves around three main axes, namely paraphrasis, explicative insertions, and substitution of Arabic *realia* with concepts either more familiar to the Latin reader, or more coherent with the sometimes fictitious Greek background in which Hermannus wanted to anchor his translation of logics. Since I have already extensively discussed the first two cases elsewhere²⁴, I will sum them up very briefly, while I will describe the third strategy in more detail.

Paraphrastic activity takes the form of an overall rephrasing of a passage which is unclear in its original shape or which, as it is, does not help the translator in making Aristotle's intentions easier to understand. On the other hand, explicative insertions are also employed for the translation of Aristotelian passages, but, while in that case they are effectively and explicitly marked by means of *rubricae* like *dixit interpres*, within the Avicennian passages themselves no title introduces the sections inserted by the translator. This reinforces the conclusion that Hermannus viewed his relationship with Avicenna's text in rather different terms than that with Aristotle's text.

An example of substitution of Arabic *realia* with Greek *realia* is to be found in Hermannus' second Avicennian quote. Faced with the staggering list of culture specific examples that illustrate *Rhet.*, III, 2-4, the translator resorts to the omission of a section of Aristotle's text, and to its replacement with Avicenna's parallel passage (IV.1, pp. 206, 8 - 212, 16 of Sālim's edition). Here, Hermannus is confronted with a discussion of diminutive and augmentative substantives, like *ḡhayb/ʿiqyān* (a little bit of gold/pure gold, p. 209, 5-6) and *ṭuwayb/hilʿa* (a little gown/a formal gown, p. 209, 6-7).

Kitāb al-Ḥiṭāba, IV.1, p. 209, 5-8 Sālim:

وعلى هذا المجرى حال استعمال اللفظ المعظم والمصغر. فإذا قيل مثلاً : ذهب, وثوب, حقر به المعنى الواحد بعينه الذى يعظمه لو قيل : العقيان, أو قيل : الخلعة. بل إذا قيل : ثعلبان, وقيل : ثعلب, وقيل : معطى, وقيل : معطى, وعنى تصغير معطى, اختلف المعنى بذلك شديداً

«Likewise for the augmentative and diminutive enunciation. And whenever one says 'a little bit of gold' and 'a little gown', the very same meaning decreases, that increases whenever one says 'pure gold', or whenever one says 'formal gown'.

²⁴ CELLI, *Some Observations* cit., pp. 487-492.

But whenever one says 'big fox' or 'little fox', and 'a bit' or 'a small bit' — and it means the reduction of the bit — in this case the meaning is very different ».

Ms. Paris, BNF Latine 16673, 129ra15-24:

«[15] Et hac via procedit usus dictionis amplificative et diminutive. Cum enim dicitur verbi gratia aurulum [diminutivum de auro] aut vestiolum [diminutivum de veste], diminuitur unum et idem significatum [20] quod amplificatur dicendo aurum eurizon aut vestimentum polimeton, [idem exametum]. Verum quando dicitur vulpes aut vulpecula, et quando dicitur minus (munus PT p. c.) aut minusculum (minusculum PT) diversificatur per hoc significatum diversitate non modica ».

We can see that the diminutives are translated by means of the standard Latin diminutive suffix *-ulus, -a, -um* as *aurulum* and *vestiolum*. The augmentatives could have been effectively rendered with periphrastic Latin expressions, as we would do when translating them in English, but Hermannus chose to translate them with Greek loanwords instead, namely *eurizon* and *polimeton*²⁵. Du Cange lists the expression *polymitus* in his glossary, that is *polymita vestis, multis variisque coloris filis et liciis contexta et variegata*. The term seems to be inspired by Greek and Du Cange reports that some *glossae* link it to ποικιλική and πολυμιταρικῇ. *Eurizon* is an alchemical term, which refers to a very pure kind of gold, or possibly to a kind of gold which has not been produced through alchemical means. Mandosio²⁶, discussing the presence of this word in the late 15th century author Jeroni Torella, states that it might be a neologism deriving from the Greek adjectives εὐρίζος (*with good roots*) or ὀβριζος (*very pure*, said of gold). The derivation of the Latin *obryzum* from either of these Greek expressions is uncontroversial. However, if Hermannus was already using this term, it cannot be seen as a 15th century neologism; moreover, it should be noted that in the Middle Ages the Greek pronunciation of ὀβριζος and εὐρίζος differed only for the first vowels, which had a very similar shape in minuscule writing, and that the two terms are also equated in the *Alphita*, a lexicon of botanical and medical *glossae* that originated in 11th century Salerno²⁷. Finally, since E. Trapp's *Lexikon zur Byzantinischer Gräzität*²⁸ also lists the adjective εὐριζος and translates it as *rein*,

²⁵ Both the Toledo and the Paris manuscripts bear the additional text *idem exametum*, which, in all likelihood, originated as a gloss. *Exametum* is probably a Greek loanword too, glossed by Du Cange as *pannus holosericus, Graecis recentioribus ἐξάμιτος*. See C. DU CANGE, P. CARPENTIER, L. HENSCHEL, *Glossarium mediae et infimae latinitatis*, L. Favre, Niort 1883-1887.

²⁶ See J.-M. MANDOSIO, *La création verbale dans l'alchimie latine du Moyen Âge*, « Bulletin Du Cange : archivum latinitatis medii aevi », 63, 2005, pp. 137-147 (p. 138).

²⁷ See J. L. G. MOWAT, *Alphita, a medico-botanical glossary from the Bodleian manuscript, Selden B*, vol. II *Anecdota Oxoniensia*, Oxford at the Clarendon Press 1887, p. 127.

²⁸ See E. TRAPP, *Lexikon zur byzantinischen Gräzität*, Verl. der Österreichischen Akademie der Wissenschaften, Wien 2005.

pur (vom Gold) there is really no reason to worry about the relationship between *eurizon* and εὐρίζος, since our Latin word surely stems from the adjective with υ, whether it was linked to ὄβριζος or not. The choice of translating the Arabic augmentatives *‘iqyān* and *ḥil‘a* in such a way is not only due to the lack of a proper augmentative suffix in the Latin language, but also to Hermannus’s desire to provide an Hellenising veneer to his Aristotelian translations, even if they are actually translations from Arabic. This is also confirmed by the fact that these and other loanwords appear in the Latin version with the Greek neutral suffix -ov, which is sometimes quite preposterous. This is the case of the meters *agamenon* and *effron*, which never existed in Greek literature, and which — but for the suffix — are plausible looking transliterations of Avicenna’s *afā* and *afman*²⁹, since the final *yā*’ of *afā* could easily have been misread as a *rā*’ and the *fā*’ in *afman* could easily have been misread as a *ḡayn*. Although it is not clear how Avicenna’s *afman* originated from the expression διθύραμβοι/*dīṭūrāmbū* of Aristotle’s Greek-Arabic translation, the permanence of ἔπη/*afā* in the text of *Kitāb al-Ḥiṭāba* leads us to assume that, in Avicenna’s eyes, *afman* is to be regarded as a Greek loanword as well.

4. AVICENNA’S WITNESSES

Although longer than the quotes from Averroes, the sections from *Kitāb al-Ḥiṭāba* quoted by Hermannus are not long enough to allow us to draw a complete picture of the state and history of Avicenna’s text in the Arabic West, for there is a limit to how many unifying copying errors can take place in just a few pages. Nonetheless, a systematic and careful comparison of the Arabic manuscripts between each other and with the Latin version can tell us something about the Arabic source on which Hermannus built his translation.

The Avicennian *Kitāb al-Ḥiṭāba* has been edited in 1954 by M. S. Sālim³⁰, who produced a very dependable text and gave us an uncommon lot of information concerning his manuscript sources, but did not put himself to the task of producing a stemmatic edition of Avicenna’s text, so that the relationship between his witnesses is not further analyzed. For a text that is preserved in a remarkable number of manuscripts, he only uses nine of them. Although Sālim gives us much useful information on the textual history of the *Kitāb al-Ḥiṭāba* in the preface to his edition, his witnesses do not seem selected on the basis of a reconstructed

²⁹ About the transliteration and translation for the names of Greek meters, see paragraph 5.7 of this paper.

³⁰ M. S. SĀLIM, *Ibn Sīnā, Al-ṣifā’, la logique, VIII, Rhétorique (Al-ḥaṭābah)*, Imprimerie Nationale, Cairo 1954.

stemma, but rather on the ground of their geographical collocation, since they are all preserved in Cairo, Istanbul, or London. This is the reason why, whenever discussing Hermannus as a witness for Avicenna, I quote Sālīm's text, but I add to it my own *apparatus*, based on my — still partial — collation of Avicennian manuscripts. Although my goal is to establish genealogical relationship between Hermannus and the rest of the *Kitāb al-Ḥiṭāba* tradition, I wish to stress that at present I do not have at my disposal a stemmatic reconstruction of the latter either, and that the present contribution is to be understood as just a small step in this direction.

Bibliographical sources testify the survival of over eighty copies of Avicenna's rhetorical section of the *Kitāb al-Šifā'*, and I have been able to collate sixteen of them, at least as far as the sections translated in Latin are concerned³¹. They are listed below in chronological order, each followed by the *siglum* by which I will reference it throughout this paper:

1. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822 (12th-13th C.) (*Sh*)
2. Istanbul, Nuruosmaniye Kütüphanesi 2710 (666H/1268) (*O*)
3. Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2442 (671-674H/1273-1276) (*S*)
4. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3261 (677H/1278) (*Vh*)
5. Cairo, Maktabat al-Azhar 331 *ḥuṣūṣiyya*, 44988 Beḥīt (13th C.) (*Cb*)
6. Istanbul, Süleymaniye Kütüphanesi, Carullah 1424 (693H/1293-1294) (*Sf*)
7. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 823 (697H/1298) (*Si*)
8. Tehran, Kitābhānah-i Mağlis-i Shūrā-yi Millī 135 (871H/1467) (*E*)
9. Istanbul, Süleymaniye Kütüphanesi, Şehid Ali Paşa 1748 (879H/1474) (*Sq*)
10. Leiden, Universiteitsbibliotheek 1445, Golius 84 (881H/1476) (*La*)
11. Istanbul, Süleymaniye Kütüphanesi, Yeni Cami 770 (888H/1483) (*Sr*)
12. Istanbul, Nuruosmaniye Kütüphanesi 2709 (886H/1481-897H/1492) (*Ob*)
13. Leiden, Universiteitsbibliotheek 1444, Golius 4 (i, t, r) (before 10th/16th C.) (*L*)
14. Istanbul, Nuruosmaniye Kütüphanesi 2708 (10th/16th C.) (*Oa*)
15. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmed III 3445 (11th/17th C.) (*Vi*)
16. London, British Museum Or. 7500 (11th/17th C.) (*Cm*)

The most ancient of these manuscripts are old enough to be chronologically proximate with Hermannus' Arabic source, which dates back to first half of the 13th century at least.

³¹ Access to the reproductions of these manuscripts and to information about them was possible within the framework of the PhiBor project (ERC AdvGr, www.avicennaproject.eu), and what I state here on this subject is in part the provisional result of the research pursued in that domain.

Most of the codices listed above either witness all the *Kitāb al-Šifā'* four sections on logic, natural philosophy, mathematics and metaphysics (this is the case of *Sh*, *O*, *S*, *Cb*, *Sf*, *Si*, *La*, *Sr*, *Ob*, *L*, *N*), or leave out mathematics (as in *E*, *Sq*, and *Cm*). The exceptions to this rule are *Vh*, which only preserves logic and natural philosophy – so that it could be the first half of a whole copy – and manuscripts *Vi* and *Cm*, which only preserve the logic section. For future research, it would probably be interesting to ascertain whether witnesses containing only one of Avicenna's four *ǧumal* form a coherent group or not.

5. HERMANNUS AS A TEXTUAL WITNESS OF AVICENNA'S *Kitāb al-Ḥiṭāba*: SOME CRITICAL PASSAGES

In the following pages, I will discuss a few textual problems suggesting that Hermannus' text is in some relationship with ms. Istanbul, Nuruosmaniye Kütüphanesi 2709 (*Ob*), which, according to its colophons, was produced in Shiraz between 1481 and 1491. In fact, although both Hermannus and *Ob* have individual mistakes, they do share a variety of errors.

Ob (and sometimes Hermannus) also shares mistakes with *Sh* and *S*, two very ancient Istanbul witnesses of the whole *Kitāb al-Šifā'*. *Sh* was copied before 1481 – probably much earlier – and is best known for the so-called 'Avicennian signature'³², while *S* was penned by Amīr al-Dīn Māniyūl between Marāğa and Ḥarbūt from 1273 to 1276³³.

After presenting the evidence concerning common readings in Hermannus and other witnesses, in section 6 of this paper I will briefly discuss the nature of his relationship with the much more recent *Ob*, without discarding the role that collation could have played in the establishment of this link.

5.1. Omission of *bi-l-ǧafā'*, 'with harshness', in Hermannus' translation

The second chapter of the second book from the *Kitāb al-Ḥiṭāba* is devoted to the deliberation on things that are particular rather than general. The section preserved by Hermannus' first Avicennian quote, that is to say II.2, pp. 73, 7 - 75, 15, discusses what is good, what is useful, and their parts. The passage quoted below introduces an example of ingratitude (opposed to gratitude, which is a good).

³² On this subject, see G. C. ANAWATI, *Essai de bibliographie avicennienne*, Dār Al-Ma'ārif, Cairo 1950, pp. 73-74, and Appendix B in A. BERTOLACCI, *Avicenna's Kitāb al-Šifā' (Book of the Cure/Healing): The Manuscripts Preserved in Turkey and Their Significance*, « Mélanges de l'Université Saint Joseph », forthcoming, and the bibliography quoted therein.

³³ More information on this manuscript is gathered in G. CELLI, *The Ms. Süleymaniye Kütüphanesi, Ayasofya 2442: A 13th Century Copy of the K. al-Šifā' with Syriac and Greek Marginalia*, « Mélanges de l'Université Saint Joseph », forthcoming.

HERMANNUS

Quod ergo deficit a possibili in
beneficentia est ex impotentia, quod
autem pertransit necessitatem in
maleficentia est ex proposito.

Et quando perdurat molestatio
molestantis et intenditur debilitas
et metus donec pertranseat horam
necessitatis¹, adducit discordiam
procul dubio.

1 et intenditur... necessitatis] om. T

AVICENNA, p. 74, 3-6 Sālīm

فما قصر¹ عن الممكن في الإحسان² فهو
تقصير، وما جاوز الضرورة من الإساءة
فهو قصد³.

وإذا دام الإذعان للمحن⁴ واشتد⁵
الضعف⁶ والخوف⁷ حتى جاوز بالجفاء⁸
وقت الضرورة أورث الإستيحاش⁹ لا
محالة.

[الإحسان 1] om. Oa habet Oa sl. 2 [فما قصر
قصد 3] add. ShOSCbSfESqSrObLVi للمحسن
Sh وللمحن [للمحن 4] Ob 4 ELVi, om. 5
واشد [واشدت 5] SrL mg. 6 للمحسن E للمخير
[والخوف 7] SSr للضعف [الضعف 6] LaObOa
[الإستيحاش 9] Ob 9 ما بها [بالجفاء 8] LaOa
SVh الاستعاش om.

AVICENNA: «Hence that which is less than what is possible in terms of benevolence is a [self-]imposed deficiency, while that which is more than what is necessary in terms of harm is an [evil] intention.

And whenever submission to misfortune is prolonged and feebleness and fright are reinforced, so that one exceeds the instant of necessity with harshness, aversion is surely triggered».

This passage is full of textual and interpretative difficulties, but I will only bring up what is — or could be — relevant for establishing relationships between Hermannus and the Arabic manuscript tradition.

Firstly, the Avicennian text underlying the Latin *in beneficentia* seems to have been similar to Sālīm's text, also attested by Vh, Si, La, K, Ch, Oa and Cm (*fī l-iḥsāni*, 'in terms of benevolence', II.2, p. 74, 4) rather than that of Sh, O, S, Cb, Sf, E, Sq, Sr, Ob, To, L, Vi, which read *fī l-iḥsāni li-l-muḥsini* ('in terms of benevolence towards the benefactor'). However, in this case it is hard to make a clear-cut statement about which was the original Avicennian option and which was the innovative one, capable of proving the relationship between two witnesses. Accordingly, this observation cannot be used to investigate the history of the manuscript tradition.

Secondly, the translator's text did not share the omission of *qaṣd* with ms Ob. Moreover, the source text for this translation *molestatio molestantis* cannot be either *al-iḍ'ān li-l-miḥan* ('submission to misfortunes', II.2, p. 74, 5), which we find in most witnesses, or *al-iḍ'ān li-l-muḥayyar* ('submission to the person

who has the choice') as in mss. *E* and *To*, or *al-iḍ'ān li-l-muḥṣini* ('submission to the benefactor') as in *Sr* and *L*. Maybe we could assume that Hermannus' Arabic source read *iḥzān al-muḥzin*, 'the affliction of he who afflicts', since in II.2, p. 74, 1 *wa-lā yaḥzunu* 'alay-hi is translated by *sine molestia*.

Finally, the Latin text offers no equivalent for the Arabic *bi-l-ḡafā* ('with harshness', p. 74, 5). If it is due to a misreading like that occurring in *Ob*, which has *mā bi-hā* instead, this would mean that Hermannus' Arabic source and *Ob* have a common mistake, and therefore that they share at least one ancestor.

5.2. Confusion between *bāb* ('domain') and *bāl* ('mind, attention'): Possible Traces of Collation

In *Kitāb al-Ḥiṭāba*, II.2, p. 75, 3-11, Avicenna discusses non-pecuniary ways of rewarding someone. Let's concentrate on the conclusion of this discussion, which is again included in Hermannus' first Avicennian quote.

HERMANNUS

Omnis enim homo delectatur in aliquo et ammiratur de aliquo, quod sibi placet, appropriato ei, aut per naturam suam aut per assuetudinem aut per experientiam ipsius. Multa enim delectant et placent propter experientiam, que, si non esset experientia, non delectarent nec placerent.

Et huius quoque capituli seu intentionis sunt directio exhortativa et consultiva fidelitas: sunt enim beneficentia et retributio quedam.

Et est quidem beneficentia et¹ eius retributiva responsio artificiosa et delectabilis valde cum sit in hora necessitatis et requisitionis sue; imo eximia est et honorabilis.

1 et] *om.* T

AVICENNA, p. 75, 7-11 Sālīm

فكل يلتذ بشيء ويتعجب من شيء يخصه. وإما بحسب ما اعتاده وتدرّب فيه, فإن الدرية قد تلذذ شيئا وتعجب منه, لو¹ لاها لم يلتذ به ولا تعجب منه,

ومن هذا الباب² أيضا الهداية والنصيحة فإنه إحسان ومكافأة ما.³

ولموافاة⁴ الصنيعة أو⁵ الجزاء وقت⁶ الحاجة اليه والرغبة فيه موقع لذيد, بل عظيم كريم.

om. 3 ما Ob البال [الباب 2 OSf أو [لو 1 EObVi, أما Oa, وافا الموافاة [ولموافاة 4 Vh قا 5 La الموافاة 6 SiLaOa و [أو 5 La الموافاة

AVICENNA: « And everyone enjoys something and admires something that is fit for him. And if (this were) about what one is prepared for and used to, then, for what

concerns preparation, one would have found pleasant and would have admired something that one would not enjoy or admire if it were not for that.

And in this domain (there are) guidance and good advice as well: indeed, this is some kind of benevolence and reward. And at the arrival of the good deed and of the reward when they are needed and wished for there is a pleasant occasion, but sizeable and valuable as well ».

Hermannus' translation for Avicenna's *min hādā l-bāb* (in 75, 9) is *huius quoque capituli seu intentionis*. Unsurprisingly, double translations are not uncommon in the Latin version of the *Rhetoric*, so that we cannot exclude that the expression *capituli seu intentionis* was indeed based on the single word *al-bāb*. However, whereas the semantic link between *al-bāb* and *capitulum* is quite straightforward, this is not the case for *al-bāb* and *intentio*, since elsewhere the latter translates words like *ma'nā* and *qaṣd*³⁴. It is therefore worth observing that the manuscript *Ob* does not read *al-bāb* but *al-bāl* ('mind, attention'), which — although graphically very similar to the original reading — actually comes much closer to Hermannus' *intention* in terms of meaning. Accordingly, rather than a double translation, *capituli seu intentionis* could be the product of the insertion in the main text of a word that had been copied in the margin because of collation with a witness that shared the reading we find in *On*. The opposite process, i.e. the insertion by collation of the reading *al-bāb* in a witness that, like *Ob*, testified *al-bāl*, is also a possibility, and maybe an even more likely one, for the phrase with *al-bāl* is not very clear, and could have pushed a conscientious reader to compare his copy of the text with other sources. The events I described most probably happened within the process of transmission of the Arabic manuscripts, or, at most, contextually with Hermannus' translation activity, for later contact with different streams of Arabic tradition could hardly have occurred.

Ultimately, the Latin rendition of *al-bāb* in 75, 9 is another hint of a possible relationship between Hermannus' Arabic source and *Ob*, but also a warning that this relationship could well be due to contamination rather than to genealogy.

5.3. *Kafā-hu* ('it has been enough for him') and *kifāya* ('sufficiency')

At the beginning of Hermannus' second quote from Avicenna (*Kitāb al-Ḥitāba*, IV.1, pp. 206, 8 - 212, 16) we find a discussion of 'borrowed' (Arabic verb *ista'ara*, p. 216, 10) expressions, which is followed by some suggestions on how to avoid explicitly referencing shameful subjects, for in rhetoric pointing

³⁴ On the subject, see the discussion at paragraph 5.4, concerning the words *aḥṣass*, *aḥṣan* and *decentiam*.

at them by gesture rather than naming them is not an acceptable solution. Finally, Avicenna argues that antiphrastic references could be satisfactory for listeners. For example, in order to blame someone, it could be beneficial to state that integrity is better than depravation, building an opposition between integrity and depravation, or even that ‘more integrity is better’, thus leaving the opposition implicit.

HERMANNUS

Et fortassis coordinabit oppositum
opposito secundum prepollentiam
et dignitatem¹ prout dictum est in
predictis² exemplis, et fortassis non
faciet mentionem eius quod diversum
est, sed solummodo hoc quod melius et
nobilius est proponet et sufficiens erit
hoc in illo processu.

1 dignitatem] ut add. T 2 predictis] premissis
P

AVICENNA, p. 207, 14-16 Sālim

وربما ذكر¹ مقابل ما هو الأحرى والأولى,
مثل ما ذكر في المثالين. وربما لم² يذكر
ذلك المخالف, بل ذكر الأولى والأحرى
وحده, وكفاه³ في ذلك الباب بعينه

و كفاية [وكفاه 3 om. Ob 2 لم] add. في [ذكر 1
ShSVhSiESqObViL

AVICENNA: « And often the opposite of what is most proper and most apt is mentioned, like what was mentioned in the two examples. And often that different thing has not been mentioned, but only what is most proper and most apt [has been], and this has been enough for him [i.e. the listener] on this very question ».

The phrase ذلك الباب بعينه, *this has been enough for him on this very question*, printed by Sālim and attested — between others — by the manuscripts O, Cb and Sf, appears in a different form in the witnesses Sh, S, Vh, Si, E, Sq, Ob, Vi, and L. In the latter group, we find the infinitive *kifāya* (‘sufficiency’) instead of the perfect *kafā* followed by the personal pronoun -*hu*, which stands for the rhetor’s audience. *Kifāya* seems to me a simplification of *kafā-hu*, for the second case implies a more complex syntactical structure that could easily have been ignored by an absent-minded copyist.

Although Hermannus’ translation *et sufficiens erit hoc in illo processu* is characterized by a participle (*sufficiens*) rather than by an infinitive, the absence of any reference to who exactly will be satisfied hints to the fact that the Arabic source of the Latin translation read an infinitive like *kifāya* — without personal attached pronoun — rather than a perfect like *kafā-hu*. Although the words *kifāya* and *kafā-hu* have a very similar *rasm* — so that this mistake is potentially polygenetic — the fact that Sh, S, Vh, Si, E, Sq, Ob, Vi, L, and Hermannus share a wrong reading does lend some weight to the hypothesis that they could be related.

5.4. Aḥṣṣ ('viler'), aḥṣan ('better') and decentiam

In the course of the same chapter — and still within Hermannus' second quote from the *Kitāb al-Ḥiṭāba* — Avicenna also discusses which elements are relevant for the effectiveness of metaphorical expressions (*Kitāb al-Ḥiṭāba*, IV.1, pp. 208, 5 - 209, 9), namely whether they spotlight nobler or viler aspects of what is described. Introduced for metaphors, this mechanism is extended to already existing expressions in the following terms:

HERMANNUS

Dictio enim que presentat rem honoratioris¹ intentionis decentior existit. Significatum quippe ex significati relatione² decentiam³ nanciscitur⁴, quamvis per unamquamque dictionum proprie sumptarum non intendatur nisi veritas unius significati, prout dici potest de mulo quoniam est de genere equorum non connotando equam que ipsum genuit. Hoc quippe competentius videbitur quam si dicatur quod sit de genere asinorum non connotando asinum.

1 honoratioris] honorationis T 2 relatione] om. T 3 decentiam] decentia TP 4 nanciscitur] naciscitur T nascitur P

AVICENNA, pp. 208, 11 - 209, 1 Sālim

فإن اللفظ الذي يقع على الشيء من حيث له معنى أكرم¹ هو أحسن من اللفظ الذي يقع عليه من حيث له معنى² أخس³ وإن⁴ كان كل واحد منهما يقصد به في الحقيقة معنى واحد، مثل ما يقال للبلبل: إنه نسل⁵ فرس من غير فرس، فإنه أوقع من أن يقال له: نسل حمار من غير حمار.

om. Sh 3 [أكرم ... معنى 2 Obs الزم [أكرم 1
[وإن 4 Ob واحسن ShOSCbsfL احسن [أخس
[نسل 5 Sr واذا Si ولو ShOSCbsfESqObLVi
LaCm ينسل

AVICENNA: « Indeed, the enunciation that happens to something insofar as it has a nobler meaning is more beautiful than the enunciation that happens to the thing insofar as it has a *viler* meaning, even if both of these were oriented towards just one meaning, like the fact of saying of the mule that it is offspring of a horse from something that is not a horse. And this is surely more tangible than the fact of saying 'offspring of a donkey from something that is not a donkey' ».

Hermannus' text is somewhat problematic. Provisionally, I would translate it as follows: « namely, the enunciation which exhibits something that is more honorable is more respected. By all means, a meaning obtains respectability thanks to (its) relationship with the thing that is meant, although through any of the enunciations, if strictly understood, nothing else is meant but the truth of just one meaning ». Please note that with the expressions 'meaning' and 'thing

that is meant' I render the same Latin word, repeated twice in the same phrase (*significatum*, apparent equivalent of the Arabic *lafẓ*, and *significati*, equivalent of *ma' nā*). This is why the meaning of the expression *significatum quippe ex significati relatione decentiam nanciscitur* is not clear at all. *Significatum* is often an equivalent for *ma' nā*³⁵, while *significatio* translates both *ma' nā* and *dalla/dalāla* (twice and four times respectively). However, in no other passage from Avicenna does Hermannus translate *lafẓ* with *significatum*. Actually, *lafẓ* is almost always translated with *dictio*, as here in the first line of the text³⁶.

I am therefore quite skeptical on the fact that in this passage the word *significatum* actually translates Avicenna's *lafẓ* in 208, 11. The problem is, of course, the second occurrence of this term, since, if it bears the same meaning of the first occurrence, it makes the phrase virtually senseless. If, on the other hand, it bears a different meaning, it could signify the thing that is meant (the 'reference', opposed to the 'meaning', in Kripkean terminology like in the rendering of Hermannus' passage offered above), which would give intelligibility to the phrase and, in a way, also a certain correspondence with Avicenna's original text. Still, this seems quite far-fetched, for, by giving to the same word two different values in such a short space, Hermannus would have been asking of his reader a really needless interpretative effort. The odds that he would do so in the only occasion in which *lafẓ* is translated as *significatum* are quite low.

To explain the riddle, if we assume the strict coincidence between the first and the second occurrence of *significatum*, we could imagine that Hermannus' Arabic text was somehow different from that of the other witnesses, offering something like *fa-inna l-ma' nā alladī yaqa'u 'alay-hi min ḥayṭu ma' nā aḥsanun*, but what seems most likely to me is that the mistake took place within the Latin manuscript tradition, and that, despite the agreement of the Toledo and the Paris manuscript on the reading *significatum*, the original text was ... *intentionis* (*ma' nā*) *decentior existit. Dictio* (*lafẓ*) *quippe ex significati relatione decentiam nanciscitur*. Later on, the alternative (or double) translation *significatum* (or *seu significatum*) for *ma' nā* would have been inserted above *intentionis*. Finally, a copyist took it for a correction of *dictio*, so that it entered the text instead of it. After all, double translations are very common in Hermannus' text, as we have seen in the case of *rationes seu intentiones* for *ma' nā* at 206, 13, cited in note.

Agreement on the textual history of Hermannus' text, however, is not a prerequisite for the genealogical point I am going to make.

³⁵ Hermannus does sometimes translate *ma' nā* with *intentio*: see, for example, *Kitāb al-Ḥiṭāba*, IV.1, p. 206, 13 (*rationes seu intentiones*), p. 207, 8 (*rerum intentiones*), and p. 210, 9 (*intentionem*), although in this text *intentio* can also stand for *qaṣd* (like in *Kitāb al-Ḥiṭāba*, IV.1, p. 206, 9).

³⁶ See for example *Kitāb al-Ḥiṭāba*, IV.1, p. 209, 14, *dictions*. Only once *lafẓ* is translated with a verbal periphrasis (*fa-idā sakata 'an-hu lafẓan, and if he does not refer to it with a verbal expression*, p. 208, 8-9, translated as *quando ... non sermocinando*).

It seems reasonable to me to understand the correspondence between Hermannus' *dictio enim que presentat rem honoratioris intentionis decentior existit. Significatum quippe ex significati relatione decentiam nanciscitur* and Avicenna's فإن اللفظ الذى يقع على الشيء من حيث له معنى أكرم هو أحسن من اللفظ الذى يقع عليه من حيث له معنى أخس as quite analytical. *Dictio enim que presentat rem honoratioris intentionis decentior existit* mirrors فإن اللفظ الذى يقع على الشيء من حيث له معنى أكرم هو أحسن, while *Significatum quippe ex significati relatione decentiam nanciscitur* mirrors من اللفظ الذى يقع عليه من حيث له معنى أخس. Otherwise, we could see both *dictio enim que presentat rem honoratioris intentionis decentior existit* and *significatum quippe ex significati relatione decentiam nanciscitur* as a global, double translation of معنى أخس ... فإن اللفظ الذى, since this is a tool often deployed by Hermannus. I would rather discard this option, for the expressions *dictio enim ... decentior existit* and *significatum quippe ... decentiam nanciscitur* are not synonymous (a precondition for viewing them as a double translation), and for it would leave the second term of comparison من اللفظ without an explicit equivalent, probably on the ground that it could be extrapolated from the first term of comparison.

If my analytical understanding of Hermannus' translation is correct, then *rem honoratioris intentionis* stands for *ma 'nā akram*, *decentior* stands for *aḥsan*, and the presence of the substantive *decentiam* in the Latin text shows that its Arabic source must have read من اللفظ الذى يقع عليه من حيث له معنى أحسن («that happens to the thing insofar as it has a better meaning»), as in *Sh*, *O*, *S*, *Cb*, *Sf*, and *L*, rather than من اللفظ الذى يقع عليه من حيث له معنى أخس («that happens to the thing insofar as it has a viler meaning») as in Sālim's edition (p. 208, 12-13). The sense of the Avicennian paragraph requires a reading that could be semantically opposed to the comparative *akram* ('nobler', p. 208, 12), so that we can state with some confidence that Sālim's choice *aḥass* was right, and that all the witnesses in favor of the innovative text *aḥsan* share a common ancestor, namely *Sh*, *O*, *S*, *Cb*, *Sf*, *L*, Hermannus' Arabic source, and *Ob*, whose text is *wa-aḥsan*.

A possible side effect of the loss of the opposition between *akram* and *aḥass* is that a subset of witnesses, i.e. *S* and *Ob*, also reads *alzam*, *more necessary*, instead of *akram*, while *Sh*, that often agrees with *S* and *Ob*, has a lacuna that goes from the first to the second من حيث له معنى. Therefore, if we think that Hermannus' source was related to the group *Sh*, *S*, *Ob*, we must also assume that these three manuscripts had a further common ancestor that was not shared by Hermannus' source.

5.5. Identification of *Mutanabbī* as a poet

In *Kitāb al-Ḥiṭāba*, IV.1, p. 209, 3-4, part of Hermannus' second quote, Avicenna is still discussing metaphorical expressions, and reworking Aristotle's stance

that metaphors can be taken from better or worse species within the same gender³⁷. One of the many examples of this offered in our text is a poetry verse:

HERMANNUS

AVICENNA, p. 209, 3-4 Sālīm

Et istud propiniquum est ei quod dixit
poeta Abultibi:

وهذا قريب مما قال أبو الطيب¹:

«O fili Kerusti, o semicece, et, ut
decentius dicam, o semividens».

أيا² بن كروس، يا³ نصف أعمى وإن
تفخرو، فيا⁴ نصف البصير

1 add. المتنبى [الطيب] CbSf, شعر add. ObCm
2 ObL [يا] 3 ObL ما [يا] 3 ObCsf فيا [يا] 2

AVICENNA: «And this is similar to what Abū al-Ṭayyib said: “Oh son of Kurawwas, oh half-blind person, and, if he is proud, oh half-seeing person”».

In his translation, Hermannus points out Abū al-Ṭayyib's (or Mutanabbī's) identity as a poet, which is implicit in the Arabic text, partially because for Avicenna's readers this identity was very well known, and partially because the fact that the following quote is a verse emerges from its meter.

How did Hermannus himself come to the conclusion that he was dealing with a poetry text? Was his grasp of Arabic culture deep enough to include basic information about Abū al-Ṭayyib and his poetic activity? Abū al-Ṭayyib's fame notwithstanding, I do not think so. To begin with, his name is wrongly transliterated as *Abultibi*, which makes it unlikely that Hermannus was familiar with this historical personality. Moreover, the translator does not seem very interested in literary and poetical works as such, as we can see that other poetic examples are left untranslated (see e.g. Avicenna's *Kitāb al-Ḥiṭāba*, IV.1, p. 210, 4). If not from his personal culture, could Hermannus derive consciousness of Abū al-Ṭayyib's role as a poet from the immediate context? Actually, the word *ši'r* ('poetry') is sometimes cited in the previous pages, for poetry texts are the readiest source of examples for metaphors. However, although Hermannus could have been aware of the fact that poetry was somehow linked to Avicenna's subject thanks to these appearances of the word *poetry* itself, this does not explain why he recognized and marked this as a verse, while he neglected other poetic lines (see again *Kitāb al-Ḥiṭāba*, IV.1, p. 210, 4). What exactly could have alerted him to the fact that this words constituted a poetic text? Expecting Hermannus to recognize the metrical structure seems somewhat too optimistic.

³⁷ See ARISTOTLE, *Aristotelis Ars Rhetorica*, ed. W. D. Ross, Oxford University Press, Oxford 1959, 1405a15-16.

Accordingly, the most likely source for our piece of information seems to have been his own Arabic manuscript, that probably had an indication similar to what we find in *Ob* and *Cm*. These witnesses insert the word *šī'r*, 'poetry', immediately after the name Abū al-Ṭayyib. It seems like a title mistakenly inserted in the Arabic text, for it has no syntactic links to the rest of the phrase: this is probably also the reason why Hermannus feels free to translate it with *poeta* rather than with *poetria*. Therefore, the Arabic source of the Latin translation and the manuscripts *Ob* and *Cm* would share an innovative reading (and a likely sign of kinship), if it were not that the insertion of a title in the text could have happened multiple times in the Arabic tradition.

5.6. Plural or Dual Number

This passage refers again to Hermannus' second Avicennian quote. In the first chapter of the fourth book, the *Kitāb al-Ḥiṭāba* Avicenna discusses the respective efficacy of altered, tropic expressions and standard, non-tropic expressions, like, for example, *red* as opposed to *beet red*. After discussing the evocative value of freshly minted and already established metaphors, he focuses on the effect of augmentative and diminutive nouns.

HERMANNUS

Verum quando dicitur vulpes aut vulpecula, et quando dicitur minus¹ aut minusculum² diversificatur per hoc significatum diversitate non modica. Oportet ergo in pluribus locis ut caveantur superfluitates utreque.

1 minus] munus PT pc. 2 minusculum] minusculum PT

AVICENNA, p. 209, 7-9 Sālim

بل إذا قيل : ثعلبان, وقيل : ثعلب¹,
وقيل : معطى, وقيل : معطى, وعنى
تصغير معطى, اختلف المعنى بذلك
شديدا. ويجب فى أكثر المواضع أن
يتوقى الإفراطات² جميعا.

الإفراطان [الإفراطات 2 ثعلب] ثعلب 1
ShOSVhCbSfSqSrOb(a.c.)OaViCm

AVICENNA: « But whenever one says 'big fox' or 'little fox', and 'a bit' or 'a small bit' — and it means the reduction of the bit — in this case the meaning is very different. In most cases, the excesses should be globally avoided ».

The eye-catching difference between the likely text of Hermannus' Arabic source and Sālim's edition is the use of the explicitly dual adjective *utreque* to specify the substantive *superfluitates*, while in the Arabic text the name is in the plural form *al-ifrātāt*. From the apparatus I provided, it can also be seen that the dual option *al-ifrātān* appears in a pretty large group of Avicennian witnesses,

so that we could be tempted to assume that Hermannus' ancestor was related to this sizeable (and ancient) group of manuscripts, because they happen to share a reading which also seems to be — crucially — wrong. However, it is not clear whether by printing the plural *Sālim* actually made the best choice. There is an obvious sense in which it can be said that the excesses that should be avoided here are two, for, while in the parallel passage Aristotle only discusses diminutives³⁸, in Avicenna augmentative and diminutive expressions are being discussed together. Moreover, the dual number, by clarifying which opposite excesses should be avoided, enables us to give a perspicuous translation of *ḡāmi* 'an as *at the same time*. Compared with 'in most cases, both excesses should be avoided at the same time', an expression like 'in most cases, the excesses should be globally avoided' (or, in R. Würsch's translation *In den meisten Fällen muss man sich vor Übertreibungen insgesamt hüten*)³⁹ could seem rather redundant. Moreover, the case for *al-ifrātān* is strengthened by the presence of a dual in the mirroring Aristotelian passage, both in Greek and in Arabic. Aristotle's text in 1405b34 is εὐλαβεῖσθαι δὲ δεῖ καὶ παρατηρεῖν ἐν ἀνφοῖν τὸ μέτριον, «however, in both cases care should be taken to preserve moderation», where the pronoun ἀνφοῖν probably refers to καὶ τὸ κακὸν καὶ τὸ ἀγαθόν («that which is good and that which is bad», 1405b30), both of which can be belittled by diminutives. The Arabic version of the *Rhetoric* in Lyons's edition⁴⁰ translates 1405b34 as follows: وقد ينبغي ان نتوقى هاهنا ونتوخى فى الأمرين جميعا القصد («and we should beware here and aim at frugality in both things at the same time»). Badawī prints *al-umūr* instead of *al-amrayn*, probably because of a different optical reading of the ms. Paris, BNF, Arabe 2346, but the Greek original ἀνφοῖν makes Lyons's solution more likely⁴¹. Finally, the dual number appears in the rhetorical section of Bar Hebraeus' *The Cream of Wisdom*, a Syriac summa that, as far as our subject is concerned, has Avicenna's *Kitāb al-Ḥiṭāba* and the Greek-Arabic translation of Aristotle's *Rhetoric* as its main sources⁴².

If then *al-ifrātāt* is an easy trivialization of *al-ifrātān*, the fact that the latter, correct, reading is shared by Hermannus and a long list of Arabic witnesses does not tell us anything about the relationship of the source of the Latin translation

³⁸ See ARISTOTLE, *Aristotelis Ars Rhetorica* cit., 1405b29-34.

³⁹ See R. WÜRSCH, *Avicennas Bearbeitung der Aristotelischen Rhetorik*, Klaus Schwarz Verlag, Berlin 1991, p. 114.

⁴⁰ ARISTOTLE, *Aristotle's Ars Rhetorica: The Arabic Version*, ed. M. C. LYONS, *Pembroke Arabic Texts*, Cambridge 1982.

⁴¹ See ARISTOTLE, *Rhetorica in versione arabica vetusta*, ed. 'A. BADAWĪ, *Maktabat an-Nahḍa al-Miṣrīya*, Cairo 1951.

⁴² See BAR HEBRAEUS, *Aristotelian Rhetoric in Syriac. Barhebraeus, Butyrum Sapientiae, Book of Rhetoric*, ed. WATT cit., p. 247.

and Avicenna's Arabic manuscripts. On the other hand, we can probably assume that the witnesses that erroneously read *al-ifrātāt* were somehow related⁴³, although allowances must be made for the possibility of a plural genesis of the mistake and for the effects of contamination. We see contamination in act in *Ob*, where the original reading *al-ifrātān* was substituted with *al-ifrātāt*.

5.7. Yurādu bi-hi ('through which one aims at')

In *Kitāb al-Ḥiṭāba*, IV.1 there is a long section devoted to the four species of 'cold enunciations' (*al-alfāz al-bārīda*, pp. 209, 10 - 212, 8 Sālim, parallel to III, 2 of Aristotle's *Rhetoric*), like periphrastic expressions, foreign words, uncommon and tropic expressions, and whether or not they are appropriate in rhetoric and poetic contexts. The longest description is allotted to the third species of stylistically cold enunciations, whose frigidity does not derive from the fact that they are long, composite or metaphorical, but from the fact that their understanding is not immediate. At the same time, Avicenna broaches the subject of the relationship between these expressions and meter, which was already discussed in Aristotle's text in 1406b1-4. Aristotle uses the words διθυραμβοποιῖς, ἐποποιῖς and ἰαμβεῖσις, which, mirrored by the Arabic transliteration of Greek words *dīthurāmbū*, *afā*, and *ayāmbū*, were bound to be an obstacle for Hermannus. While Averroes overlooks them all, Avicenna does give a transliteration for all of them (based of course upon the Arabic version) explaining how the first two are to be used as well (in 211, 13, 212, 1 and 212, 3).

It is in this context that we find the following passage, which is relevant not so much for its content, but rather for the way in which Arabic manuscripts witness it and for the translation offered by Hermannus.

HERMANNUS

Dictio vero extranea pertinet metro nominato 'effron', et est metrum quo utuntur ad inducendum pavorem seu terrorem in legibus et constitutionibus rerum¹ publicarum, ad incitandum mentes hominum ut insistant rebus honestis et fugiant a contrariis...

1 rerum] om. P

AVICENNA, pp. 211, 15 - 212, 1 Sālim

وأما الغريب فيصلح للوزن المسمى
 "أفى" فإنه وزن يراد¹ به² تهويل الأمر في
 السياسات والشرائع، ليخشع³ أو يحذر
 ...

[ليخشع 3 ShSob إليه 2 ShSob لادنه [يراد 1
 ليخشع ESqVi

⁴³ The relevant witnesses are *Si*, *E*, *La*, *L*, and *Ob* (p.c.).

AVICENNA: « And as far as what is abstruse is concerned, it is good for the meter which is called Afā. Indeed, it is a meter through which one aims at making something scary in administrative things and laws, so that people will be submissive or fearful ».

Instead of the relative clause *yurādu bi-hi* (« through which it is aimed at ... », or « through which one aims at... »), in the manuscripts *Sh*, *S* and *Ob* we find لادنه, a likely *vox nihili*. Whether this innovation is based on the mere alteration of the *rasm* برادنه or rather on a meaningful and graphically similar expression like *li-adnā* (which would give rise to the translation « a meter for the lowest [possible level of] fear »), this mistake is hardly reversible or polygenetic, so that *Sh*, *S*, and *Ob* must share a common ancestor. The very fact that لادنه is a meaningless expression also rules out the possibility of its presence being due to contamination, while this could easily be the case for its absence from other witnesses eventually related to *Sh*, *S*, and *Ob*, for this unintelligible word could have prompted a zealous copyist (or reader) to check other sources and restore the correct reading. If Hermannus' Arabic source was indeed linked to the common ancestor of *Sh*, *S*, and *Ob*, this is possibly the reason why it still offered the correct reading *yurādu bi-hi*, which Hermannus correctly substitutes with words cognate of *induco* (*ad introducendum* and *inductio*) at p. 211, 2 of Sālim's edition as well. Of course, the possibility that Hermannus' translation conveys the right reading independently from mss. *Sh*, *S*, and *Ob* remains open.

6. CONCLUSIONS

Hermannus' text does share a few innovative readings with *Ob*, for some of which, however, collation could have played a role. This is the case of *capituli seu intentionis/al-bāb* (discussed in paragraph 5.2) and *poeta/šī'r* (discussed in paragraph 5.5). Other mistakes are potentially polygenetic, like in the case of *kifāya/sufficiens* (see paragraph 5.3). Nonetheless, in other passages confusing forces like collation and polygenesis of errors are a less likely explanation, as for the omission of *bi-l-ğafā'* (at paragraph 5.1), for *aḥsan/decentiam* (paragraph 5.4), and for *al-ifraṭān/superfluitates utreque* (paragraph 5.6).

Ob also shares innovative readings with the much older *Sh* and *S*, so that this triplet is surely interrelated (see, for example, paragraphs 5.4 and 5.7). Since it is not clear whether all the mistakes shared by *Sh*, *S*, and *Ob* are in Hermannus' Arabic source as well, we must assume that either the relationship between Hermannus and *Ob* does not extend to *Sh* and *S*, or that these mistakes were present in Hermannus' Arabic source as well, but they have been 'hidden' by the translation process. In the first hypothesis, it would be more reasonable to

ascribe the similarity between *Ob* and the Latin version to collation. On the other hand, if the second hypothesis is true, and with the large dose of caution made mandatory by the brevity of Hermannus' Avicennian excerpts, the relationship between *Sh*, *S*, *Ob*, and the Latin translation could also be genealogical.

ABSTRACT

The Rhetoric Section of the Kitāb al-Šifā' : Hermannus Alemannus' Latin Translation and the Arabic Witnesses

Hermannus Alemannus, active as a translator in 13th Century Castile, set himself to the task of preparing an Arabic-Latin version of Aristotle's *Rhetoric*, with the avowed goal of making all the sections of the Alexandrian *Organon* available to the Western public. In this context, he also translated some short sections of Fārābī's *Kitāb al-Ḥiṭāba*, and of Averroes' *Middle Commentary* on the *Rhetoric*, together with two excerpts from the rhetoric section of Avicenna's *Kitāb al-Šifā'*, in order to substitute or explain difficult sections of Aristotle's text.

The goal of this contribution is to find out at which degree the textual relationships between the Arabic and the Latin witnesses of Avicenna's rhetorical work can be established and described, for the sake of their historical and editorial value.

Hermannus' text seems to share a few innovative readings with ms. Istanbul, Nuruosmaniye Kütüphanesi 2709. For some of them collation could have played a role, while other mistakes are potentially polygenetic. Nonetheless, in other cases, confusing forces like collation and polygenesis of errors are a less likely explanation.

Ms. Istanbul, Nuruosmaniye Kütüphanesi 2709 also shares innovative readings with the much older mss. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822 and Süleymaniye Kütüphanesi, Ayasofya 2442, so that this triplet is probably interrelated. It is not clear whether all the mistakes shared by mss. Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822, Süleymaniye Kütüphanesi, Ayasofya 2442, and Istanbul, Nuruosmaniye Kütüphanesi 2709 are in Hermannus' Arabic source as well. We must therefore assume that either the relationship between Hermannus and ms. Istanbul, Nuruosmaniye Kütüphanesi does not extend to the two older manuscripts (and is likely due to collation), or that these mistakes were present in Hermannus' Arabic source as well, but they have been hidden by the translation process.

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FRÉDÉRIQUE WOERTHER

Citer/traduire.

**La traduction arabo-latine de la *Rhétorique* d'Aristote
par Hermann l'Allemand et les citations d'al-Fārābī et Averroès**

La traduction latine de la version arabe de la *Rhétorique* d'Aristote a été réalisée à une date inconnue par Hermann l'Allemand. Entreprise à la demande de Jean, chancelier du roi de Castille, alors archevêque de Burgos (1240-1256)¹, elle semble avoir été commencée entre 1243 et 1256; elle a en tout cas été publiée en même temps que les *Didascalia in Rethoricam Aristotelis ex glosa Alfarabii*, prologue du Grand Commentaire d'al-Fārābī à la *Rhétorique* d'Aristote², et que la traduction arabo-latine du Commentaire moyen à la *Poétique* d'Averroès, en 1256³.

Cette traduction est aujourd'hui préservée dans deux manuscrits, conservés à Paris (P = *Parisinus Latinus* 16673, saec. XIII⁴) et à Tolède (T = *Toletanus* 47.15, saec. XIII⁵). Un manuscrit de Florence (F = *Laurentianus Plut.* 90. Sup. 64, saec. XV⁶) a préservé sur deux folios les passages d'Averroès qui ont été utilisés par Hermann dans sa traduction⁷. Il n'existe aujourd'hui aucune édition critique de cette version arabo-latine de la *Rhétorique*, en dépit de l'intérêt philologique, historique et philosophique qu'elle pourrait représenter, et qu'on a souligné ailleurs⁸.

¹ W. F. BOGGESE, *Hermannus Alemannus's rhetorical translations*, « *Viator* », 2, 1971, pp. 227-250.

² Les *Didascalia* vont bientôt paraître dans une nouvelle édition, réalisée par M. Aouad et moi-même, avec une traduction française, des notes et un commentaire.

³ Voir le *Prologue* d'Hermann en annexe.

⁴ Pour une description de ce manuscrit et de son contenu, voir AL I 581, et B. SCHNEIDER, *Die mittelalterlichen griechisch-lateinischen Übersetzungen der aristotelischen Rhetorik*, Walter De Gruyter, Berlin 1971, pp. 31-33, auxquels on peut ajouter la description suivante de la composition du manuscrit en cahiers : 18 quaternions (144) + 1 trinion (150) + 3 quaternions (173) [1⁴ (8), 2⁴ (16), 3⁴ (24), 4⁴ (32), 5⁴ (40), 6⁴ (48), 7⁴ (56), 8⁴ (64), 9⁴ (72), 10⁴ (80), 11⁴ (88), 12⁴ (96), 13⁴ (104), 14⁴ (112), 15⁴ (120), 16⁴ (128), 17⁴ (136), 18⁴ (144), 19³ (150), 20⁴ (158), 21⁴ (166), 22⁴ (173)].

⁵ Voir AL I 853-854, et SCHNEIDER, *Die mittelalterlichen griechisch-lateinischen Übersetzungen der aristotelischen Rhetorik* cit., pp. 30-31.

⁶ Voir AL I 925-926.

⁷ Voir M. AOUAD (éd., intr., trad., comm.), *AVERROÈS, Commentaire moyen à la Rhétorique*, 3 vols., Vrin, Paris 2002, vol. I, p. 2 et p. 9.

⁸ F. WOERTHER, *Le rôle des traductions dans les traditions textuelles : les versions arabe et arabo-latine de la Rhétorique d'Aristote*, in D. SMITH éd., *Les enjeux intellectuels des pratiques d'édition*, Les Classiques Garnier, Paris (à paraître).

Compte tenu du faible nombre de manuscrits pour cette tradition, il est impossible de proposer un *stemma* et de décrire l'interdépendance des copies conservées P, T et F. Voici toutefois les remarques que l'on peut formuler. F (pour ce qui est des citations d'Averroès) semble dépendre d'un manuscrit appartenant à la même famille que P. P présente généralement de meilleures leçons par rapport à T, qui comporte des lacunes et des erreurs (sans compter l'altération de certains folios, due à l'humidité), mais il ne faut pas pour autant éliminer les leçons de T, qui permettent à l'occasion de corriger certains passages erronés de P⁹.

1. LA VERSION ARABO-LATINE DE LA *RHÉTORIQUE* EN CONTEXTE

Avant d'examiner les procédures employées par Hermann lorsqu'il recourt à al-Fārābī et Averroès, il importe de resituer la version arabo-latine de la *Rhétorique* d'Aristote dans son contexte.

1.1. La copie arabe

Hermann¹⁰ a réalisé sa traduction à partir d'une copie arabe de la *Rhétorique*, qui appartient à la même tradition que le texte utilisé par al-Fārābī, Avicenne et Averroès lorsqu'ils rédigèrent leurs commentaires respectifs à la *Rhétorique*¹¹.

Cette version arabe de la *Rhétorique* est l'une des trois versions répertoriées dans le *Fihrist* d'Ibn al-Nadīm¹², qui mentionne en effet, premièrement, une traduction « ancienne », élaborée avant l'époque de Ḥunayn, deuxièmement,

⁹ Pour éditer les passages d'al-Fārābī et Averroès, nous avons par ailleurs adopté les principes suivants : les variantes orthographiques n'ont pas été mentionnées dans les apparats, certains manuscrits ayant recours à des abréviations pour les mots dont l'orthographe est fluctuante. On a donc conservé l'orthographe courante des mots *inquit* (contre *inquit*), *enthimema* (contre *entimema*), *rhetorica* (contre *rethorica*), etc. La ponctuation a été adaptée aux normes actuelles.

¹⁰ M. GRIGNASCHI (intr., éd.), *al-Fārābī, Deux ouvrages inédits sur la Rhétorique*, 2. *Didascalia in Rethoricam Aristotelis ex glosa Alpharabii*, Dar al-Mashreq, Beyrouth 1971, pp. 134-137.

¹¹ Concernant Averroès, on sait qu'il a utilisé, pour la rédaction de son Commentaire moyen (lequel suit le texte arabe du Stagirite de suffisamment près pour que l'on puisse procéder à une comparaison littérale entre la version arabe d'Aristote et la version arabe du Commentaire) une version différente de celle qui est conservée dans le *Parisinus Arabus* 2346. En effet, non seulement les chapitres de la *Rhétorique*, II 15-17 sont absents dans la copie utilisée par Averroès alors qu'ils sont présents dans le manuscrit de la Bibliothèque Nationale, mais encore le *Parisinus Arabus* 2346 n'a pas conservé le passage de *Rhétorique*, III 11, 1412a 16 - III 14, 1415a 4, qui a pourtant été commenté par Averroès.

¹² M. AOUD, *La Rhétorique. Tradition syriaque et arabe*, in *Dictionnaire des philosophes antiques*, I, Édition du CNRS, Paris 1989, pp. 455-472, et Id., *La Rhétorique. Tradition syriaque et arabe. Compléments*, in *Dictionnaire des philosophes antiques. Supplément*, Édition du CNRS, Paris 2003, pp. 219-223.

une traduction réalisée par Iṣḥāq Ibn Ḥunayn (m. 910), et troisièmement la traduction d'Ibrāhīm b. ʿAbdallāh (m. ca 940). L'unique version qui nous soit parvenue de la traduction arabe de la *Rhétorique* est l'« ancienne » traduction — peut-être réalisée à partir d'un intermédiaire syriaque¹³ — et dont l'examen de

¹³ L'utilisation d'un intermédiaire syriaque pourrait expliquer certaines mélectures de la traduction arabe. Lyons suppose un tel intermédiaire dans son édition. Même si aucun manuscrit actuellement conservé ne contient de version syriaque de la *Rhétorique* et qu'on n'a aucune preuve qu'une traduction syriaque de la rhétorique ait existé avant le x^e s., ni qu'un aristotélécien de langue syriaque de cette période se soit intéressée à ce texte en particulier (J. W. WATT, *Aristotelian Rhetoric in Syriac. Barhebraeus, Butyrum Sapientiae, Book of Rhetoric*, Brill, Leiden - Boston 2005, p. 6), deux éléments rendraient toutefois plausible l'hypothèse qu'une traduction syriaque de la *Rhétorique* aurait existé à date ancienne (U. VAGELPOHL, *Aristotle's Rhetoric in the East. The Syriac and Arabic Translation and Commentary Tradition*, Brill, Leiden - Boston 2008, pp. 55-61) : l'intérêt des érudits de langue syriaque (comme Athanase de Balad, Jacob d'Édesse ou Georges, évêque des Arabes, au vii^e s.) pour l'*Organon*, et 2° le rôle central joué par les textes de logique — dont fait partie la *Rhétorique* — non seulement dans les cercles philosophiques et scientifiques, mais également, et plus largement, dans le cadre des études de théologie (pour apprendre à formuler un problème et à en débattre) et de médecine (la logique faisant partie du cursus scolaire, par exemple à Alexandrie). Cependant, il convient de remarquer que, pour des raisons religieuses, l'étude de l'*Organon* dans les écoles chrétiennes fut restreinte à certaines parties du corpus qui aurait exclu la *Rhétorique* et la *Poétique*, lesquelles n'auraient pas été traduites en syriaque à date ancienne : ce n'est qu'après la conquête musulmane que cette restriction fut levée et que l'enseignement de la logique prit une nouvelle forme. De plus, si les auteurs syriaques connaissaient la *Rhétorique* au moment où le texte a été traduit en arabe, cette connaissance n'était pas nécessairement écrite ou textuelle. John Watt (*Aristotelian Rhetoric in Syriac cit.*, pp. 6-8) a récemment montré que la traduction syriaque de la *Rhétorique* sur laquelle s'est appuyé Bar Hebraeus (m. 1286) pour rédiger son commentaire — le *Butyrum sapientiae* — est très proche de la version arabe et que cet auteur a retranscrit les termes grecs là où la traduction arabe a utilisé les équivalents arabes. Par conséquent — comme le texte syriaque contenu dans le *Butyrum sapientiae* n'est pas une traduction de l'arabe —, soit la traduction arabe a été effectuée à partir de la version syriaque, soit les traductions arabe et syriaque ont été réalisées à partir de sources grecques très semblables, soit le traducteur arabe, travaillant à partir du grec, a consulté la version syriaque de la *Rhétorique* qui a aussi été utilisée par Bar Hebraeus. Dans la comparaison qu'il a récemment proposée des versions grecque et arabe de la première partie du livre III de la *Rhétorique* (*Aristotle's Rhetoric in the East cit.*, pp. 62-180), Uwe Vagelpohl suggère que la traduction arabe du traité présente des similitudes avec les techniques employées dans le cercle d'al-Kindī et qu'elle a été directement effectuée à partir du texte grec. D'après lui en effet, les syriacismes de la traduction arabe de la *Rhétorique* ne doivent pas être automatiquement interprétés en faveur de l'utilisation d'un intermédiaire syriaque, car ils ont pu affecter la version arabe à différents moments de la traduction et de la transmission du texte (Cf. W. P. HEINRICH, *Aristotle's Ars Rhetorica. The Arabic Version*, ed. M. Lyons, Cambridge, 1982, « Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften », 1, 1984, pp. 312-316 [pp. 313-314]). De plus, il importe toujours de garder en mémoire qu'un traducteur chrétien, habitué au syriaque, peut commettre des syriacismes, alors même qu'il traduit directement du grec vers l'arabe (Cf. F. ZIMMERMANN, *The Origins of the so-called Theology of Aristotle*, in J. KRAYE, W. F. RYAN, C. B. SCHMITT eds., *Pseudo-Aristotle in the Middle Ages: The Theology and other texts*, The Warburg Institute, London 1986, pp. 110-240 [p. 114] : « We must bear in mind that a Christian translator accustomed to Syriac routines of literary expression might commit Syriacisms even when translating from Greek. Only in very special cases does a peculiar turn of phrase in a Graeco-Arabic text point unequivocally to a Syriac substratum »).

la terminologie, du style et des contresens indique en effet une date antérieure à Hunayn. Elle a probablement été réalisée au VIII^e s., puisque des notes marginales « portent témoignage d'une copie de 320 H, d'une collation de 209 H et d'un lecteur de 113 H, ce qui nous ramènerait à 731 ap. J.-C. »¹⁴. Elle est conservée à Paris dans une copie unique datée du XII^e s. (*Parisinus Arabus* 2346), et dont l'état matériel ne permet plus aujourd'hui la consultation directe. Une remarque marginale du manuscrit¹⁵ indique que le texte du *Parisinus Arabus* 2346 est une copie du texte d'Ibn al-Samḥ (m. 1027), lequel a édité au XI^e s. le texte arabe à partir de deux versions arabes de la *Rhétorique* et d'une version syriaque qu'il avait également à sa disposition, et à laquelle il a eu recours quand les deux versions arabes étaient obscures ou insuffisantes pour établir un texte compréhensible.

1.2. Hermann l'Allemand

Les informations biographiques dont on dispose sur Hermann l'Allemand sont peu nombreuses et assez lacunaires, même si l'on a récemment tenté de reconstituer la vie de ce personnage de façon un peu plus précise, notamment à partir des archives de Tolède¹⁶.

Il fut probablement nommé évêque d'Astorga en 1266 avant de mourir dans cette fonction en 1272. Entre 1240 et 1256, Hermann réalisa les six traductions suivantes : traduction latine du Commentaire moyen à l'*Éthique* à Nicomaque d'Averroès, achevée le 3 juin 1240 à Tolède¹⁷ ; traduction latine de la *Summa*

¹⁴ AOUAD, *La Rhétorique. Tradition syriaque et arabe* cit., p. 457.

¹⁵ Les informations tirées des notes marginales du manuscrit 2346 ont été analysées par LYONS, pp. II-VI, et VAGELPOHL, *Aristotle's Rhetoric in the East* cit., pp. 39-51.

¹⁶ Cf. R. GONZÁLEZ RUIZ, *Hombres y libros de Toledo, 1086-1300*, Fundación Ramón Areces, Madrid 1997, pp. 586-602. Sur Hermann l'Allemand, ses traductions et la bibliographie afférente voir aussi : G. H. LUQUET, *Hermann l'Allemand* († 1272), « Revue de l'Histoire des Religions », 44, 1901, pp. 407-422 ; J. FERREIRO ALEMPARTE, *Hermann el alemán, traductor del siglo XIII en Toledo*, « Hispania Sacra », 35, 1983, pp. 9-56 ; M. PÉREZ GONZÁLEZ, *Hermann el Alemán, traductor de la Escuela de Toledo*, « Anales Toledanos », 29, 1992, pp. 17-28, et R. GONZÁLEZ RUIZ, *El traductor Hermann el Alemán*, in A. M. LOPEZ-ALVAREZ ET AL. eds., *La Escuela de Traductores de Toledo*, Disputación Provincial de Toledo, Toledo 1996, pp. 51-64.

¹⁷ Cf. Colophon : *Dixit translator. Et ego compleui eius translationem ex arabico in latinum die iouis mensis iunii anno ab incarnatione Domini MCCXL apud urbem Toletanam in capella Sanctae Trinitatis* (Le traducteur a dit. Et j'ai achevé sa traduction de l'arabe en latin le 3 juin de l'année 1240 de l'incarnation du Seigneur dans la ville de Tolède en la chapelle de la Sainte Trinité). Cette paternité, qui n'est pas absolument certaine dans la mesure où le colophon mentionne seulement « le traducteur », non le nom explicite de Hermann, a cependant été récemment démontrée par D. N. HASSE, à partir d'une comparaison minutieuse des traductions latines de certaines particules de liaison et autres expressions logiques arabes, dans D. N. HASSE, *Latin Averroes Translations of the First Half of The Thirteenth Century*, Olms, Hildesheim - Zürich - New York 2010. Sur le Commentaire d'Averroès à l'*Éthique* à Nicomaque, voir M. AOUAD, F. WOERTHER, *Le Commentaire par Averroès du chapitre 9 du livre X de l'Éthique à Nicomaque : pédagogie de la contrainte, habitudes et lois*, « Mélanges de l'Université Saint-Joseph », 62, 2009, pp. 353-380.

Alexandrinorum (abrégé arabe de l'*Éthique à Nicomaque*), achevée le 8 avril 1243 ou 1244, selon toute probabilité à Tolède; traduction latine de la version arabe de la *Rhétorique* d'Aristote; traduction latine du Commentaire moyen à la *Poétique* d'Averroès, achevée à Tolède le 17 mars 1256; traduction latine des *Didascalia in Rethoricam ex glosa Alfarabii* — appelée aussi « glose » dans les textes qui les signalent, non datée —, prologue du Grand Commentaire d'al-Fārābī à la *Rhétorique* d'Aristote; traduction partielle des *Psaumes* (1-70) en castillan à partir du texte hébreu, probablement réalisée elle aussi à Tolède¹⁸. Semblant appartenir à un projet plus vaste — celui d'une traduction de la Bible en castillan —, cette traduction soulève la question de savoir si Hermann connaissait suffisamment l'hébreu pour aborder cette tâche ou s'il s'est fait assister dans son travail.

Le témoignage de son contemporain, Roger Bacon, qu'il rencontra à Paris entre 1240 et 1247, nous fait connaître sa méthode de travail et ses compétences en langue arabe¹⁹:

« Heremannus quidem Alemannus adhuc vivit episcopus, cui fui valde familiaris. Qui, mihi sciscitanti eum de libris logicae quibusdam, quos habuit transferendos in Arabico, dixit ore rotundo, quod nescivit logicam, et ideo non ausus fuit transferre. Et certe si logicam nescivit, non potuit alias scire scientias, sicut decet. Nec Arabicum bene scivit, ut confessus est, quia magis fuit ajiutor translationum quam translator; quia Sarascenos tenuit secum in Hispania, qui fuerunt in suis translationibus principales ».

« Hermann l'Allemand est un évêque, vivant encore aujourd'hui, et dont je fus un ami très proche. Alors que je l'interrogeais sur certains livres de logique qu'il avait fait traduire en arabe, il me dit, d'une voix pleine, qu'il ignorait la logique et que c'était la raison pour laquelle il n'avait pas osé les traduire. Assurément, sans la connaissance de la logique, il n'aurait pas pu connaître les autres sciences comme il convient. Il n'avait pas non plus une bonne connaissance de l'arabe, comme il le confessa, puisqu'il fut davantage un assistant de traductions qu'un traducteur, puisqu'il avait des Sarrasins avec lui en Espagne, qui dirigèrent ses traductions »²⁰.

Au début du ^{xx}e siècle, le biographe d'Hermann, Georges-Henri Luquet, notait à son tour:

¹⁸ M. W. DE DIEGO LOBEJÓN, *El Salterio de Hermann el Alemán. Ms Escorialense I-j-8. Primera traducción castellana de la Biblia*, Universidad de Valladolid, Valladolid 1993.

¹⁹ Voir W. F. BOGGESE, *Hermannus Alemannus and the Sandy Desert of Zarabi*, « Journal of the American Oriental Society », 86, 1966, pp. 418-419.

²⁰ F. R. BACON, *Opus Tertium. Opus Minus. Compendium Philosophiae*, ed. J. S. BREWER, Longman, London 1859, pp. 471-472.

« Quel procédé employa Hermann pour faire ses traductions ? On connaît le procédé constant des traducteurs du Moyen-Âge. Un Juif converti traduisait en langue vulgaire, en espagnol par exemple, la traduction arabe du texte grec et c'était cette seconde traduction que traduisait en latin celui qui signait la traduction définitive. Hermann suivait une méthode analogue, avec cette différence qu'il employa, non des Juifs, mais des Arabes. Le témoignage de Bacon, qui le dit expressément, se trouve confirmé par certaines particularités de ces traductions, notamment dans la transcription des noms propres, qui montrent qu'elles sont l'œuvre de musulmans connaissant la langue savante »²¹.

Toutefois, l'examen d'au moins trois traductions réalisées par Hermann — celle de la *Rhétorique*, des *Didascalies*, et du Commentaire moyen à l'*Éthique à Nicomaque*²² — tendrait à nuancer le témoignage de Bacon et l'observation de Luquet. Non seulement la compétence d'Hermann en arabe semble en effet avoir été bien meilleure que ce que lui-même affirme selon Bacon — et sans doute Hermann ne pouvait-il faire preuve que de modestie devant son ami —, mais certains passages de ses traductions indiquent aussi que le travail aurait été réalisé en équipes parallèles ou en atelier, plutôt que par un seul individu.

Ces observations, dont le caractère est encore trop général, ne vaut sans doute pas pour toutes les traductions qui ont été exécutées par Hermann, ou sous le nom d'Hermann : seule une étude plus approfondie des techniques de traduction réalisées sur les textes eux-mêmes permettrait en effet de distinguer précisément les différentes méthodes et procédures qui ont été mises en œuvre dans chacun des traités arabes traduits en latin par Hermann.

1.3. Le témoignage d'Hermann

Le dernier témoignage que l'on ait conservé sur la traduction arabo-latine de la *Rhétorique* provient d'Hermann lui-même, qui a fait précéder les versions latines de la *Rhétorique* et du Commentaire d'Averroès à la *Poétique* d'un prologue (dont on trouvera l'édition, réalisée à partir de P et T, dans l'Annexe I de cette contribution).

Après avoir souligné l'inscription de la *Rhétorique* et de la *Poétique* parmi les traités de logique, conformément à l'interprétation orientale de l'*Organon*

²¹ LUQUET, *Hermann l'Allemand* († 1272) cit., pp. 415-416.

²² S. HARVEY, F. WOERTHER, *Averroes' Middle Commentary on Book I of the Nicomachean Ethics*, « Oriens », 42, 2014, pp. 254-287 ; WOERTHER, *Le rôle des traductions dans les traditions textuelles* cit. ; EAD., *Les translittérations dans la version latine du Commentaire moyen à l'Éthique à Nicomaque*, « Bulletin de Philosophie Médiévale », 56, 2014, pp. 61-89 ; EAD., *Les noms propres dans le Commentaire moyen à l'Éthique à Nicomaque d'Averroès. Contribution à une étude sur les traductions latine et hébraïque du Commentaire* (à paraître) ; EAD., *Les fragments arabes du Commentaire moyen à l'Éthique à Nicomaque d'Averroès* (en préparation).

aristotélicien qui a été entre autres suivie par al-Fārābī, Avicenne et Averroès, Hermann s'excuse de la « difficulté » et de la « rudesse » de sa traduction, laquelle n'est pas moins difficile ni rude, dit-il, que la langue des deux textes arabes qu'il a traduits. C'est cette obscurité de la version gréco-arabe de la *Rhétorique* qui, poursuit-il, a poussé al-Fārābī le premier à rédiger un commentaire qui puisse en déterminer la signification tout en supprimant les exemples grecs qui restaient à ses yeux impénétrables ; c'est cette obscurité aussi qui explique pourquoi, toujours d'après Hermann, l'exposé d'al-Fārābī n'est pas dépourvu d'incertitudes et n'a pas été mené — du moins d'après les témoignages d'Avicenne et d'Averroès — jusqu'à son terme ; c'est cette obscurité, enfin, qui explique que la *Rhétorique* et la *Poétique* aient été jusqu'ici négligées par les Arabes, et qui justifie qu'Hermann ait cherché — non sans difficulté, par ailleurs — de l'aide pour comprendre ses textes :

« Quod autem hi^a duo libri logicales sint, nemo dubitat qui perspexerit libros Arabum famosorum^b, Alfarabii videlicet et Avicenne^c et Avenrosdi^d et quorundam aliorum. Imo ex ipso textu manifestius hoc^e patebit. (...) Nec miretur quisquam vel indignetur de difficultate vel quasi ruditate translationis. Nam multo difficilius et rudius ex greco in arabicum est translata, ita quod Alfarabius qui primus conatus est ex rethorica aliquem intellectum glosando elicere, multa exempla greca propter ipsorum obscuritatem pertransiens derelinquit^f. Et propter eandem causam multa dubie exposuit ; et ut Avicenna^g et Avenrosd^h estimant propter hanc etiam causam glosam usque ad finem negotii non perduxit. Et isti quoque duo viri in finibus tractatum suorum, quos imitantes Aristotelemⁱ composuerunt, sic inquiunt. Hoc est quod intelligere et excipere^j potuimus de translatione que pervenit ad nos horum voluminum Aristotelis^k. Ideoque usque hodie etiam apud arabes hi^l duo libri quasi neglecti sunt, et vix unum invenire potui qui mecum studendo in ipsis vellet diligentius laborare ».

^a hi P : hii T ^b perspexerit libros Arabum famosorum P : libros Arabum prospexerit T
^c avicenne P : aviscenne T ^d averrosdi P : avenrosd T ^e hoc P : hic T ^f derelinquit P : dereliquit T
^g avicenna P : aviscenna T ^h averrosd P : avenrosdi T ⁱ aristotelem P : aristotilis
^j excipere P : excerpere T ^k aristotelis P : aristotilis T ^l hi P : hii T

« Or, que ces deux livres relèvent de la logique, personne n'en doute une fois que l'on aura considéré les livres des Arabes célèbres, je veux parler d'al-Fārābī, Avicenne, Averroès et certains autres. Bien plus : c'est le texte lui-même qui fera apparaître plus évident encore ce « caractère logique ». (...) Et il n'y a pas lieu de s'étonner ou de s'indigner du caractère difficile ou, pour ainsi dire, de la rudesse de la traduction, car la traduction du grec en arabe a été réalisée de façon beaucoup plus difficile et plus rude : aussi al-Fārābī, qui le premier s'est efforcé par sa glose d'arracher à la rhétorique quelque sens, a laissé tomber en les ignorant de nombreux exemples en grec, en raison de leur obscurité. Et c'est pour la même raison que son exposé (sc. al-Fārābī) comporte de nombreuses

incertitudes et, comme Avicenne et Averroès le pensent, c'est pour cette raison aussi qu'il n'a pas poursuivi sa glose jusqu'à la fin de son travail. Et ces deux hommes dirent à la fin de leurs traités qu'ils composèrent en imitant Aristote : voilà ce que nous avons pu comprendre et tirer de la traduction de ces volumes d'Aristote qui nous est parvenue. C'est pourquoi jusqu'aujourd'hui, même chez les Arabes, ces deux livres ont été pour ainsi dire négligés, et c'est à peine si j'ai pu trouver une personne qui accepte de travailler avec assez de soin sur ces textes en les étudiant avec moi ».

Tout à fait conscient, donc, de la qualité médiocre de sa traduction qui découle de la qualité médiocre des versions arabes sur lesquelles il a travaillé, Hermann présente les versions latines de la *Rhétorique* et de la *Poétique* non comme un travail achevé et définitif, mais comme un *work in progress*, provisoire et conscient de ses propres limites, qui vise simplement à favoriser la transmission de textes qui sinon seraient tombés dans l'oubli. Ce caractère provisoire est par ailleurs souligné à travers l'exemple de l'*Éthique à Nicomaque*. Ce traité, traduit, lui aussi par Hermann, de l'arabe en latin, en 1240 — mais il s'agit en réalité du Commentaire moyen à l'*Éthique à Nicomaque* d'Averroès — a été remplacé, environ six ou sept ans plus tard, par la traduction latine de Robert Grosseteste, réalisée directement à partir de la version grecque originale du texte d'Aristote²³, et qu'Hermann mentionne encore ici dans son prologue :

« Veniam igitur concedant qui forsitan^a non immerito^b poterunt hunc meum laborem de imperfectione redarguere. Et si eis non placuerit quicquam fructus ex eo querere, possunt ipsum deserere redargutum. Sane tamen ipsis consulo ut malint hos codices habere sic translatos, quam penitus derelictos. Nichil enim pura privatione incultius, sed potest quoquomodo hiiis^c habitis per paulatina incrementa finis tandem desiderate perfectionis facilius impertiri,

²³ Sur la *Translatio lincolniensis*, voir R. GAUTHIER, *L'Éthique à Nicomaque*, vol. I, Introduction, Béatrice Nauwelaerts, Louvain - Paris 1970, pp. 120-122 : « En 1246-47, Robert fit paraître une œuvre complexe dont le triple contenu devait directement ou indirectement commander toute l'exégèse médiévale de l'*Éthique*. C'est d'abord une traduction complète, ou plutôt une révision de l'ancienne traduction complète que Robert Grosseteste semble avoir possédée en son entier (...). Cette traduction de l'évêque de Lincoln sera souvent citée au moyen âge sous le nom de *Translatio lincolniensis* (...). A cette traduction de l'*Éthique à Nicomaque* était jointe la traduction d'un recueil de commentaires grecs, recueil formé sans doute à Constantinople à la fin du ^{xii}^e ou au début du ^{xiii}^e siècle ; il se composait des commentaires d'Eustrate sur le livre I, de l'Anonyme ancien sur les livres II et V, de Michel d'Éphèse sur le livre V (dont il y avait ainsi deux commentaires), d'Eustrate à nouveau sur le livre VI, de l'Anonyme récent sur le livre VII, d'Aspasius (en une version remaniée, peut-être par Michel d'Éphèse) sur le livre VIII, et enfin de Michel d'Éphèse encore sur les livres IX et X. Enfin venaient des *Notule* de Robert Grosseteste lui-même : malheureusement ces notes, écrites sans doute dans les marges du manuscrit de Grosseteste, ne nous sont parvenues que de façon très fragmentaire (...) ».

quemadmodum contingit in libro Nichomachie quem latini Ethicam Aristotelis appellant^d. Nam et hunc prout potui in latinum verti eloquium ex arabico. Et postmodum reverendus pater magister Robertus Grossi capitis sed subtilis intellectus Lincolniensis^e episcopus ex primo fonte unde emanaverat, greco videlicet, ipsum est completius^f interpretatus et grecorum commentis proprias annectens notulas commentatus ».

^a forsitan P : forsitam T ^b immerito P : in merito T ^c hiis T : om. P ^d aristotelis appellant P : appellant aristotilis T ^e lincolniensis T : linkoniensis P ^f completius P : completius T

« Qu'ils accordent donc leur pardon, ceux qui, peut-être non sans raison, pourront réfuter pour son imperfection ce travail qui est le mien. Et ceux qui n'auront pas voulu en retirer un quelconque fruit peuvent l'abandonner, une fois réfuté. Toutefois, je leur conseille vraiment de préférer posséder ces livres ainsi traduits, plutôt que d'en être totalement privés. Car il n'y a rien qui soit plus dépourvu d'éducation que la pure et simple privation, et l'on peut, de quelque façon, si l'on est en possession de ces <livres>, communiquer plus facilement, au moyen de progrès insensibles, les plus hauts degrés de la perfection finalement désirée, tout comme c'est le cas du *Livre de Nicomaque* que les Latins appellent l'*Éthique* d'Aristote. Car ce <livre> aussi, je l'ai traduit, autant que j'ai pu, de l'arabe en langue latine. Et, peu après, le père vénérable, Maître Robert — Grosseteste, mais d'un esprit subtil —, évêque de Lincoln, l'a expliqué de façon plus complète à partir de la première source dont il était provenu, à savoir le grec, et l'a commenté en attachant aux commentaires des Grecs ses propres notes ».

En définitive, Hermann se borne à souligner dans ce prologue la difficulté qu'a représentée pour lui la traduction en latin des versions arabes de la *Rhétorique* et du *Commentaire à la Poétique*, et qui tient en particulier, selon son témoignage, à la médiocrité des versions arabes elles-mêmes. S'il mentionne les noms d'al-Fārābī, Avicenne et Averroès, c'est uniquement pour justifier l'intérêt philosophique de ces deux traités aristotéliens, qui font en effet partie intégrante du corpus logique aux yeux des philosophes héritiers des commentateurs Alexandrins. S'il confesse s'être fait aider dans la traduction, il n'évoque en revanche nulle part les procédures particulières qu'il a pu emprunter lors de ce travail, et notamment le recours aux commentaires des trois philosophes arabes mentionnés plus haut. C'est toutefois l'idée d'un travail provisoire, qui ne restera valable que jusqu'au moment où l'on produira une meilleure version du texte, ou, mieux, où l'on en découvrira enfin la version grecque originale, qui doit guider en premier lieu l'examen des citations d'al-Fārābī, Avicenne et Averroès dans la version arabo-latine de la *Rhétorique*. Elles semblent, a priori, être en effet destinées à éclairer un texte difficile, à en rendre la lecture plus aisée, et peut-être aussi, à guider les futurs lecteurs et traducteurs du texte qui reprendront le travail là où l'a laissé Hermann.

2. LE RECOURS À AL-FĀRĀBĪ ET AVERROËS DANS LA TRADUCTION ARABO-LATINE DE LA *RHÉTORIQUE* D'ARISTOTE

L'étude suivante se fonde sur les éditions des fragments et témoignages d'al-Fārābī et Averroès dans la version arabo-latine de la *Rhétorique*, parues respectivement en 2012²⁴ et 2011²⁵. En précisant les modalités du recours, par Hermann, à al-Fārābī et Averroès, elle fournira une introduction et un cadre général à l'examen des citations d'Avicenne.

Pour commencer, il convient de noter que les citations d'al-Fārābī et d'Averroès requièrent un traitement distinct. En effet, le Grand Commentaire d'al-Fārābī à la *Rhétorique*, auquel Hermann semble emprunter, n'a pas été conservé — mis à part le prologue, préservé sous le titre latin de *Didascalia* —, tandis que le Commentaire moyen d'Averroès à la *Rhétorique*, auquel recourt Hermann, existe aujourd'hui encore dans sa version originale arabe²⁶, ce qui autorise des comparaisons précises entre les citations en latin d'Hermann d'une part, et le texte arabe d'Averroès d'autre part.

On compte, dans l'ensemble de la version arabo-latine de la *Rhétorique*, trois fragments d'al-Fārābī — dans les chapitres 2, 12 et 15 du livre I —, ainsi que deux témoignages, le premier apparaissant dans le livre 15 du livre I, et le second, indiquant dans la marge du manuscrit P seulement, l'endroit où al-Fārābī aurait interrompu son commentaire, en *Rhét.* III 9, 1409a 24. Les fragments d'Averroès sont beaucoup plus nombreux : on en compte quatorze, mais qui ne portent que sur les chapitres 1, 4, 5 et 6 du livre I.

2.1. Identification et délimitation des citations

L'identification de chacune des citations ne pose généralement pas de problème.

2.1.1. al-Fārābī

Dans le cas d'al-Fārābī, les citations viennent interrompre le texte avec la mention du nom du philosophe, sans mise en page particulière dans aucun des

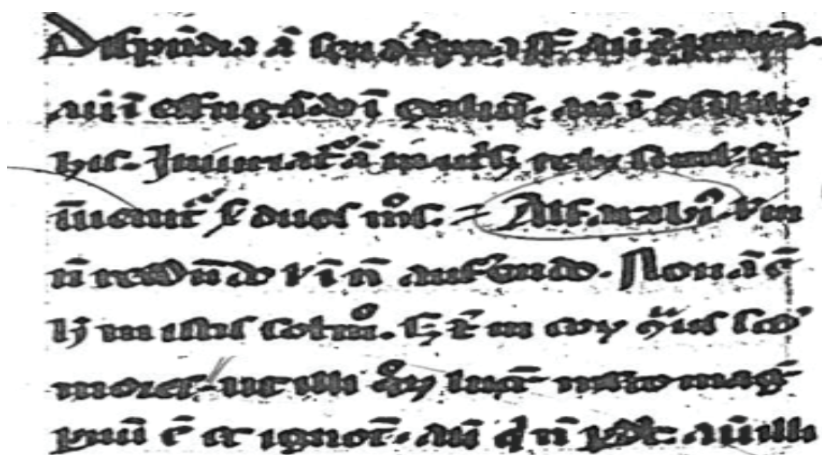
²⁴ F. WOERTHER, *Les traces du Grand Commentaire d'al-Fārābī à la Rhétorique d'Aristote dans la traduction arabo-latine de la Rhétorique par Hermann l'Allemand*, « Bulletin de Philosophie Médiévale », 54, 2012, pp. 137-154.

²⁵ F. WOERTHER, *Les citations du Commentaire moyen à la Rhétorique d'Aristote par Averroès dans la traduction arabo-latine de la Rhétorique d'Aristote par Hermann l'Allemand*, « Mélanges de l'Université Saint-Joseph », 63, 2010-2011, pp. 323-359.

²⁶ AOUD (éd., tr., notes, comm.), AVERROËS, *Commentaire moyen à la Rhétorique d'Aristote* cit.

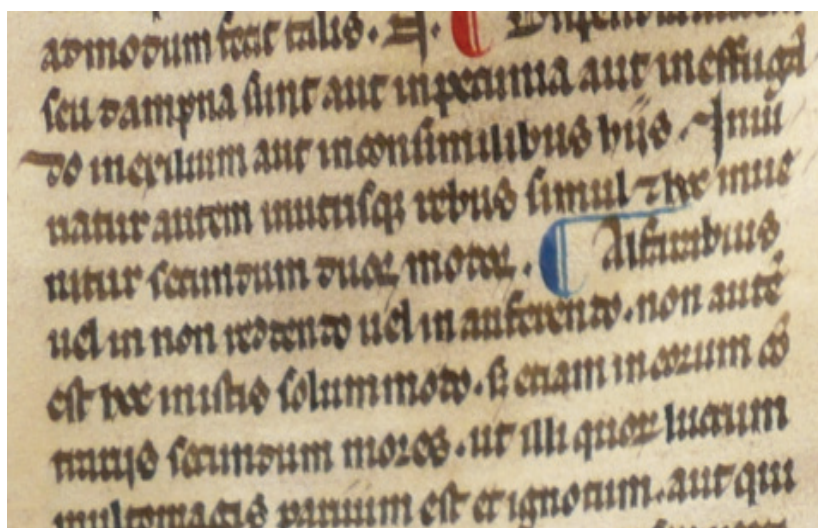
deux manuscrits. Le manuscrit T, qui présente l'emploi de couleurs (rouge et bleue) et d'ornements a toutefois recours à des pieds-de-mouche, mais seulement pour marquer la présence du nom propre 'alharabijs'. Les expressions qui doivent être rapportées à al-Fārābī sont le plus souvent soulignées dans le corps du texte par les copistes de P et T.

P, 88vb.



Disputa a seipso. Si autem
aut est fugiendi causa aut est
hic. Invenit a multis rebus. Sed et
invenit et duos mores. **A**lharabijs
in redendo in non auferendo. Non autem
hij in istis solum. Et in alijs quibus
mores. ut illi qui lucrum magis
parum est et ignotum. aut qui non possunt

T, 41ra.



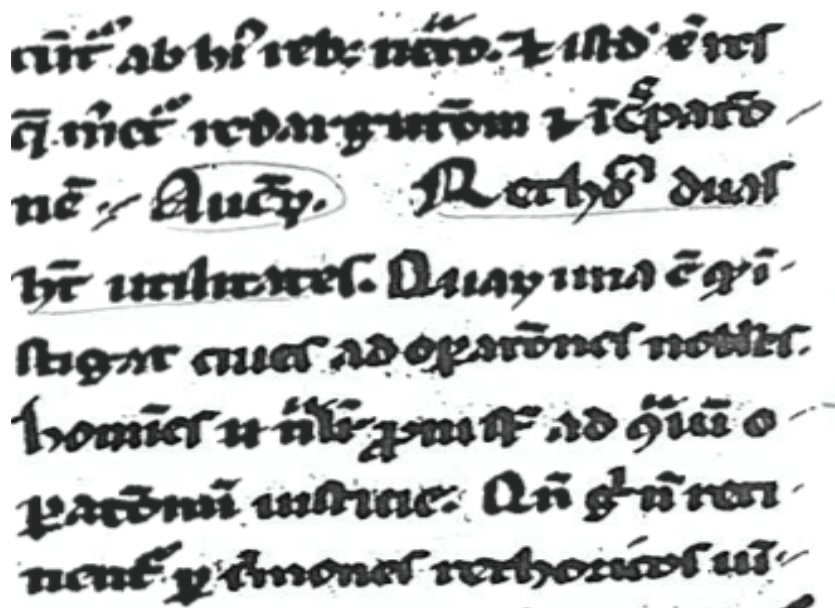
ad motum fecit talis. **A**lharabijs
seu dampna sunt aut in pecunia aut in effugio
de in periculum aut in consimilibus huius. Invenit
natur autem in multis rebus simul. **A**lharabijs
natur secundum duos mores. **A**lharabijs
uel in non redendo uel in auferendo. non autem
est hoc in istis solum modo. si etiam in eorum
naturis secundum mores. ut illi quorum lucrum
multo magis parum est et ignotum. aut qui

2.1.2. Averroès

Concernant Averroès : dans tous les cas, et dans chacun des deux manuscrits P et T, le texte arabo-latin de la *Rhétorique* est interrompu par la mention du nom d'Averroès, qui est suivi de la citation de son Commentaire. En revanche, la fin des citations est généralement difficile à déterminer, dans la mesure où le texte d'Hermann ne présente aucune marque qui viendrait délimiter la citation d'Averroès de la suite du texte de la *Rhétorique*. A cette dernière remarque on peut toutefois apporter deux nuances : 1° le nom d'Aristote apparaît dans deux cas seulement (citations de l'**Annexe III 1, 5**) dans les deux manuscrits, pour indiquer le retour au texte d'Aristote, et donc la fin de la citation ; 2° le manuscrit T a recours à des pieds-de-mouche de couleurs qui permettent de marquer la fin d'une citation. On note ainsi la présence d'un pied-de-mouche bleu après la fin de la citation d'Averroès, et avant la reprise du texte de la *Rhétorique* dans les citations de l'**Annexe III 3, 5, 7, 11** et d'un pied-de-mouche rouge dans les citations de l'**Annexe III 4, 12, 13**.

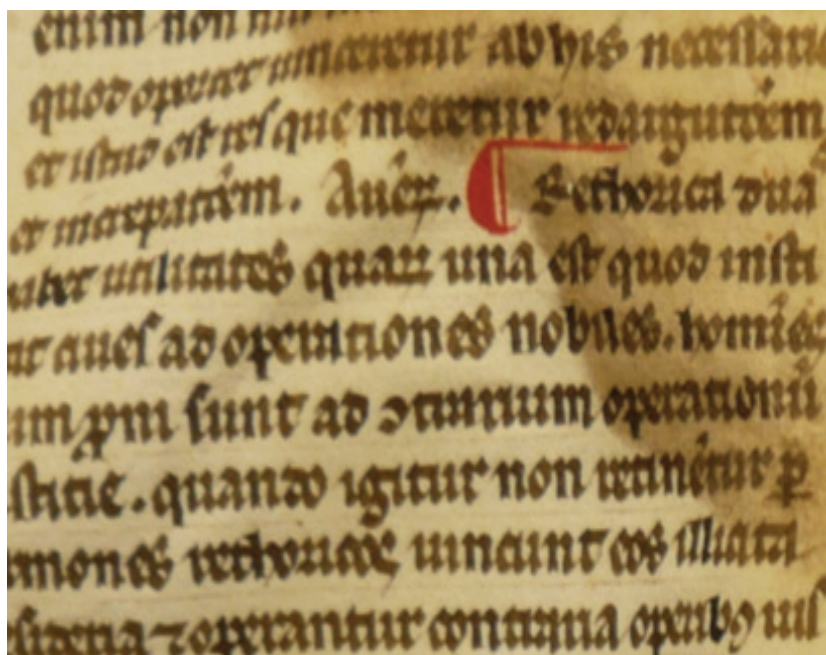
Dans le cas où les citations apparaissent dans les marges du manuscrit (citations de l'**Annexe III 8, 9, 14** dans P uniquement), les limites de la citation sont matériellement visibles.

P, 67va.



cū ab hī reb: nēro. 7 ind' ē res
 q̄ mē redarguētōm 7 tēpato
 nē. Aucy. Rethor' dunt
 hī utilitatē. Quia una ē q̄
 signat cū ad opatōnes nōtē.
 homīes u nīl p̄mī ad q̄m o
 patōmī uīdēt. Qū g' n' rē
 nē p̄mōnes rēthorīes uī

T, 36va.



2.2. Nature des citations

S'ils s'ouvrent tous sur la mention du nom d'al-Fārābī ou d'Averroès, les passages mentionnés par Hermann dans sa traduction ne présentent toutefois pas les mêmes caractéristiques.

2.2.1. al-Fārābī

a. Fragments

Dans le cas d'al-Fārābī, Hermann propose, d'une part, de très courtes citations, qui sont sans doute extraites de son Grand commentaire à la *Rhétorique*, et viennent éclairer l'emploi d'un mot en le glosant (citations de l'**Annexe II 1**) ou expliciter un terme qui est sous-entendu dans le texte d'Aristote (citations de l'**Annexe II 2, 3**).

Par exemple, dans le cas de l'extrait de l'**Annexe II 2**, qui se situe en *Rhét.* I 12, chapitre où Aristote énumère sous forme de catalogue les différentes dispositions de ceux qui commettent des injustices.

• *Rhét. grecque* (I 12, 1372b 2-8)

Καὶ ὅσοις τὰ μὲν ἀδικήματα λήμματα, αἱ δὲ ζημίαι ὀνειδὴ μόνον. Καὶ οἷς τοῦναντίον τὰ μὲν ἀδικήματα εἰς ἔπαινόν τινα, οἷον εἰ συνέβη ἅμα τιμωρήσασθαι ὑπὲρ πατρός ἢ μητρός, ὥσπερ Ζήνωνι, αἱ δὲ ζημίαι εἰς χρήματα ἢ φυγὴν ἢ τοιοῦτόν τι· δι' ἀμφοτέρω γὰρ ἀδικοῦσι καὶ ἀμφοτέρως ἔχοντες, || πλὴν οὐχ οἱ αὐτοὶ ἀλλ' οἱ ἐναντίοι τοῖς ἡθεσιν.

«Et tous ceux pour qui les injustices apportent un profit sûr, alors que les châtiments s'arrêtent aux reproches. Et ceux à qui, au contraire (sc. de ceux qui recherchent le profit), les injustices valent un éloge, par exemple si elles ont eu comme effet collatéral la vengeance de leur père ou de leur mère, comme pour Zénon, alors que la punition se borne à une amende, à l'exil ou à quelque chose du même genre. Car si l'on commet l'injustice, c'est pour ces deux motifs, et dans l'une ou l'autre de ces dispositions, || à ceci près que les auteurs ne sont pas les mêmes mais des personnes de caractères opposés »²⁷.

• *Rhét. arabe* (Lyons²⁸, pp. 62. 19 - 63. 6)

والذين لا يلزمهم غرم في المنفعة وذلك يُظَنُّ أَنَّهُ للفتنة والهرج، والذين يُؤدِّبهم الظلم إلى المدح والذكر، كما قد يعرض للمرء أن يأخذ بثأره في الأب وفي الأم معاً، كما فعل زينون، وأما الخسرات والمضارّ ففي المال أو في الهرب أو ما أشبه ذلك، فقد يظلمون في الأمرين جميعاً، وذلك موجود لهما في جهتين || غير أنه ليس لهؤلاء فقط، ولكن للذين أضادهم في الأخلاق أيضاً، ...

«Et ceux à qui n'incombe pas un dédommagement <en raison du> profit <qu'ils ont tiré de leur action injuste>, et on pense ainsi que cela se produit dans la sédition et le désordre, et ceux qui commettent une injustice et finissent par être loués et célébrés, comme ce qui arrive à l'homme qui venge dans le même temps son père et sa mère, comme l'a fait Zénon, tandis que les dommages et les atteintes se réduisent à de l'argent ou à la fuite <en exil> ou ce qui ressemble à cela, commettent des injustices pour ces deux raisons, et cela existe pour eux dans deux manières, || sauf que cela ne concerne pas ceux-là seulement, mais aussi ceux dont les caractères sont opposés aux leurs ... ».

²⁷ Le texte grec est cité dans l'édition de R. KASSEL éd., *Aristotelis Ars rhetorica*, Walter De Gruyter, Berlin - New York 1976, et la traduction française est celle de P. CHIRON tr., *ARISTOTE, Rhétorique*, Garnier-Flammarion, Paris 2007.

²⁸ M. C. LYONS éd., *Aristotle's Rhetoric. The Arabic Version*, Pembroke College, Cambridge 1982. L'édition de Lyons remplace la précédente édition de la version arabe de la *Rhétorique*: 'A. BADAWI, *Aristūṭālīs al-Khaṭāba, al-Tarjama al-'Arabiyya al-Qadīma*, Cairo 1959.

• Rhét. Hermann (I 12, 1372b 1-8)

« Et illi quos non consequitur restitutio eorum quorum habuerunt utilitatem ut putatur in guerris et ceteris translationibus et illi quos famosos reddit et laudabiles injuria, quemadmodum jam accidit cum quis sumpsit vindictam sanguinis suorum in deceptione^a pariter patrum et matrum aliorum quemadmodum fecit talis; dispendia autem seu dampna sunt aut in pecunia aut in effugando in exilium aut in consimilibus his^b. Injuriatur autem in utrisque rebus simul et hoc^c invenitur secundum duos modos — Alfarabius: vel in non reddendo vel in efferendo^d. Non autem est hoc in istis solummodo, sed etiam in eorum contrariis secundum mores, ... ».

^a deceptione *correx*i : reptione PT ^b his P : hiis T ^c hoc *om.* P ^d in efferendo *correx*i : in auferendo T in non auferendo P

« Et ceux que ne suit pas le dédommagement de ceux qu'ils ont utilisés, comme <ce qui se passe>, pense-t-on, dans les guerres et autres perturbations, et ceux que l'injustice rend célèbres et dignes de louange, comme ce qui est déjà arrivé lorsque quelqu'un a vengé le sang des siens, tout en abusant dans le même temps d'autres pères et mères, comme l'a fait un tel; or, les peines ou amendes consistent soit en <une somme d'> argent, soit en la fuite en exil, soit en des choses semblables à celles-ci. Or, on commet l'injustice dans l'un et l'autre cas à la fois, et cela se trouve selon deux modes — al-Fārābī: « ou dans l'absence de compensation ou dans l'exaltation ». Or, cela ne se réduit pas à ceux-là seulement, mais <concerne> aussi ceux qui leur sont contraires selon les caractères, ... ».

La citation d'al-Fārābī vient éclaircir l'expression *duos modos* en explicitant ce qu'elle est censée recouvrir. Dans le texte d'Aristote, les deux « motifs » dont il est question renvoient au profit d'une part, mentionné dans le premier exemple (commettent une injustice ceux dont les actes — injustes — apportent un profit sûr, alors que les châtements sont légers), et l'éloge ou honneur d'autre part (commettent également une injustice ceux dont les actes — injustes — ont comme effet collatéral une « belle action »). Les deux dispositions dont il est question sont alors celles de l'homme qui poursuit respectivement le profit ou l'honneur. La remarque d'al-Fārābī reprend elle aussi les deux cas mentionnés précédemment : 1° soit on commet l'injustice en ne dédommageant pas ceux contre qui on a commis l'injustice — c'est le cas dans lequel on ne compense pas (*in non reddendo*, « dans l'absence de compensation ») — où *reddere* fait écho à *restitutio*; 2° soit on commet une injustice qui vaudra un éloge à celui qui la commet — c'est le cas où l'on tire de la gloire de son acte injuste (*in efferendo*, « dans l'exaltation »), si l'on accepte toutefois de corriger la leçon *auferendo* de P et T en *efferendo* — où *efferre* ferait écho aux deux adjectifs employés plus haut, *famosus* et *laudabilis*.

b. Témoignages

Hermann cite également le nom d'al-Fārābī pour insérer une remarque sur le contenu général de la glose du philosophe : il s'agit des deux notes (citations de l'**Annexe II 4, 5**). La note de l'**Annexe II 5**, par exemple, que l'on ne trouve que dans P, se situe *in margine* face au texte latin de *Rhét.* III 9, 1409a 24 (*Homines autem ponunt pondus totaliter decentia<m> distinctivam de distinctionibus itaque et qualiter se habeant ad pondera dictum est*) et indique, fol. 133v :

« Huc pervenit glosa alfarabi ».

« La glose d'al-Fārābī est parvenue jusqu'ici ».

Il est toutefois impossible de déterminer avec certitude si cette remarque marginale provient d'une connaissance directe, par Hermann, du Grand commentaire d'al-Fārābī dans sa totalité, ou s'il a tiré cette information d'un témoignage indirect, peut-être par l'intermédiaire d'Avicenne et d'Averroès, qui, si l'on en croit son Prologue à la traduction de la *Rhétorique*, avait indiqué qu'al-Fārābī n'avait en effet pas mené sa glose jusqu'à son terme (cf. *et ut Avicenna et Avenrosd estimant propter hanc etiam causam glosam usque ad finem negotii non perduxit*, comme Avicenne et Averroès le pensent, c'est pour cette raison aussi qu'il [sc. al-Fārābī] n'a pas poursuivi sa glose jusqu'à la fin de son travail).

2.2.2. Averroès

Ce que j'ai appelé, très certainement à tort, les citations d'Averroès dans la traduction arabo-latine de la *Rhétorique* ne méritent en réalité pas toutes cette dénomination. Les passages mentionnés par Hermann sous le nom d'Averroès ne sont pas toutes des traductions latines exactes du Commentaire arabe du Cordouan, car Hermann procède très souvent à des coupes dans le texte d'Averroès pour ne conserver que ce qu'il estime important au moment où il l'insère dans sa propre traduction. A d'autres moments, il semble même réécrire le texte d'Averroès, en le paraphrasant plutôt qu'en le traduisant.

a. Citations latines littérales

Les citations de l'**Annexe III 4, 5, 7, 8, 9, 10, 12, 13** proposent une traduction latine suivie du texte d'Averroès.

Je citerai ici à titre d'exemple la citation de l'**Annexe III 12**, à comparer avec le texte arabe du *CmRhét.* Cet extrait se situe dans le passage de la *Rhétorique* où Aristote examine le bien et l'utile, qui constituent les fins du genre délibératif (*Rhét.* I 6, 1362a 34-b 2 : « Cela étant posé, il est nécessaire que soit un bien à la fois

le fait d'entrer en possession de biens et le fait d'être débarrassé de maux. Car le fait de ne pas avoir le mal correspondant est la conséquence simultanée du fait d'entrer en possession d'un bien, tandis que le fait d'avoir le bien correspondant est la conséquence ultérieure du fait d'être débarrassé d'un mal. Est aussi un bien le fait d'entrer en possession d'un bien plus grand à la place d'un plus petit ou d'un mal moindre à la place d'un plus grand », trad. Chiron) :

• *CmRhét* 1.6.6 (Aouad²⁹ p. 49)

والخيرات التي تُستفاد من الخيرات يُسمِّيها أرسطو فوائد بإطلاق. وأما تلك
فُيُسمِّيها انتقالات، ويعني بذلك أنها انتقال من شرٍّ إلى ما هو أخفُّ شرًّا منه أو
انتقال من شرٍّ إلى ما هو خير.

« ...Aristote appelle avantages absolus (*fawā'id bi-ṭlāq*) les biens qu'on gagne (*tustufād*) par les biens, mais il appelle les autres un transfert ; il veut dire par là qu'ils sont un transfert d'un mal à ce qui est un mal plus léger (*aḥaff ṣarran*) ou un transfert d'un mal à ce qui est un bien ».

• *Rhét.* Hermann (I 6, 1362a 34-b 2)

« Averroes. Bona que ex bonis proveniunt nominavit Aristoteles utilia simpliciter. Ex malis autem provenientia nominavit transmutationes que sunt quandoque de majori malo ad minus, quandoque autem de malo ad bonum ».

« Averroes. Les biens qui proviennent (*proveniunt*) de biens, Aristote les a nommés simplement utiles (*utilia simpliciter*). Or, les choses qui proviennent de maux, il les a appelées modifications, qui sont quelquefois d'un plus grand mal en un moindre mal (*minus*), quelquefois d'un mal en un bien ».

Cette traduction de l'arabe d'Averroès en latin est littérale. On peut ajouter quelques remarques concernant les choix de traduction d'Hermann ici, notamment la traduction — ou plutôt l'adaptation — de l'arabe *tustufād* (ils sont gagnés) par le latin *proveniunt* (ils proviennent) ; la traduction de l'arabe *fawā'id bi-ṭlāq* (avantages absolus) par le latin *utilia simpliciter* (simplement utiles), ou la traduction de l'arabe *aḥaff ṣarran* (un mal plus léger) par le latin *minus* (moindre mal).

b. Extraits non suivis

Dans d'autres cas, Hermann découpe le texte d'Averroès et insère dans sa propre traduction uniquement les passages qui lui paraissent pertinents. C'est

²⁹ AOUAD (éd., tr. intr., comm.), *AVERROÈS, Commentaire moyen à la Rhétorique d'Aristote* cit. Les traductions sont également celles de cette édition.

par exemple le cas de la citation de l'**Annexe III 1** (tout comme les citations de l'**Annexe III 2, 6, 11, 14**), où Hermann ne procède pas à la traduction du passage entier du Commentaire d'Averroès, mais opère des coupes.

Il s'agit du passage, qui ouvre le traité d'Aristote, et qui évoque les rapports de la rhétorique et de la dialectique (*Rhét.* I 1, 1354a 1-4: «La rhétorique est le pendant de la dialectique: car l'une et l'autre portent sur des matières qui — étant communes, d'une certaine façon, à tout le monde — sont de la compétence de tout un chacun et ne relèvent d'aucune science délimitée. C'est pourquoi tout le monde, d'une certaine façon, prend part aux deux, car tout le monde, jusqu'à un certain point, se mêle tant de critiquer ou de soutenir un argument que de défendre ou d'accuser», trad. Chiron).

• *CmRhét* (Aouad 1.1.1-1.1.2, p. 1-2)

1.1.1. وذلك أنَّ كليهما يؤمَّان غاية واحدة وهي مخاطبة الغير، إذ كانت هاتان الصناعتان ليس يستعملهما الإنسان بينه وبين نفسه كالحال في صناعة البرهان بل إنما يستعملهما مع الغير، ويشتركان بنحو من الأنحاء في موضوع واحد، إذ كان كلاهما يتعاطى النظر في جميع الأشياء، ويوجد استعمالهما مشتركاً للجميع، أعني أن كل واحد من الناس يستعمل بالطبع الأقاويل الجدلية والأقاويل الخطبية. وإنما كان ذلك كذلك لأنه ليست واحدة منهما علماً من العلوم منفرداً بذاته، وذلك أن العلوم لها موضوعات خاصة ويستعملها أصناف من الناس خاصة. ولكن من جهة أن هذين ينظران في جميع الموجودات وجميع العلوم تنظر في جميع الموجودات فقد توجد جميع العلوم مشاركة لهما بنحو ما. وإذا كانت هاتان الصناعتان مشتركين فقد يجب أن يكون النظر فيهما لصناعة واحدة وهي صناعة المنطق. 1.1.2. وكل واحد من الناس يجد مستعملاً لنحو ما من أنحاء البلاغة ومنتهاً منها إلى مقدار ما، وذلك في صنفَي الأقاويل اللذين أحدهما المناظرة والثاني التعليم والإرشاد وأكثر ذلك في الموضوعات الخاصة بهذه الصناعة وهي مثل الشكاية والاعتذار وسائر الأقاويل التي قي الأمور الجزئية.

« 1.1.1. En effet, l'une et l'autre se proposent une même fin, qui est de s'adresser à autrui, puisque l'homme n'utilise pas ces deux arts pour converser avec soi-même comme c'est le cas de la démonstration (*sinā'at al-burhān*), mais qu'il les utilise seulement avec autrui. De plus, l'une et l'autre sont associées, d'une certaine manière, dans un même sujet, car les deux s'occupent de l'examen (*al-nazar*) de toutes les choses; et leur usage est associé à tout le monde (*wa-yūḡad isti'māluhumā muštarakan li-l-ḡamī*), je veux dire que chaque homme utilise (*yasta'mil*) par nature les propos dialectiques et les propos rhétoriques. Il n'en est ainsi que parce (*wa-innamā kāna dālika kaḏālika li-annahū*) qu'aucun de ces deux arts n'est une science parmi les sciences, séparée en elle-même. En effet,

les sciences ont des sujets propres et elles sont utilisées par des sortes de gens (*asṇāf min al-nās*) qui leur sont propres. Mais, en tant que ces deux examinent tous les êtres et que toutes les sciences examinent tous les êtres, toutes les sciences sont associées, d'une certaine manière, à ces deux. Et puisque ces deux arts sont associés, il est nécessaire que l'examen qu'on en fait appartienne à un même art, qui est l'art de la logique. 1.1.2. Chaque homme utilise l'un quelconque des aspects de l'éloquence, et parvient jusqu'à un certain niveau de celle-ci (*ilā miqdār mā*), cela dans les deux sortes de propos dont l'une est la dispute et l'autre, l'enseignement et la mise sur la voie, et, dans la plupart des cas, dans les sujets propres à cet art, comme l'accusation, la défense et tous les autres propos concernant les affaires particulières ».

• *Rhét.* Hermann (I 1, 1354a 1-4)

« Averroes. Ambe enim intendunt unum finem, et est sermo ad alterum. Non enim utitur eis homo ad se ipsum, ut est in demonstrativis, sed tantum ad alterum, et conveniunt quodam modo in subjecto^a uno. Ambiunt enim omnia [...] et omnes homines intromittunt se naturaliter de sermonibus topicis et^b rhetoricis [...]: neutra ergo harum est separatim et singulariter scientia. Quelibet enim scientia certum et proprium habet subjectum et proprium artificem, [...] et quilibet hominum modo aliquo et usquequo utitur rethoricalibus, [...] accusatione videlicet et defensione, et ceteris que circa particularia existunt ».

^a subjecto PF : facto T ^b et PF : in T

« Averroès. Toutes deux (sc. la rhétorique et la dialectique) visent en effet une seule fin, et c'est le propos adressé à autrui. En effet, l'homme ne les utilise pas pour s'adresser à lui-même, comme c'est le cas dans les <arts> démonstratifs (*demonstrativis*), mais seulement pour s'adresser à autrui, et elles se rejoignent, d'une certaine façon, dans un seul sujet. Elles tournent (*ambiunt*) en effet autour de tous les sujets, [...] et tous les hommes se consacrent (*intromittunt se*) par nature aux propos topiques et rhétoriques [...]: ni l'une ni l'autre n'est donc une science séparée et singulière. Toute science possède en effet son sujet défini et propre, et son artisan (*artificem*) propre, [...] et tout homme utilise, d'une certaine façon et jusqu'à un certain point (*modo aliquo et usquequo*), les outils rhétoriques, [...] à savoir l'accusation et la défense, ainsi que les autres propos qui concernent les choses particulières ».

Les passages soulignés dans le texte arabe d'Averroès sont ceux qu'Hermann a traduits en latin. Afin de rendre plus claire encore la comparaison du texte arabe d'Averroès avec la traduction latine d'Hermann, on a indiqué les coupes opérées par le traducteur dans le texte latin par des crochets.

Dans les passages conservés par Hermann, le latin reprend en général mot-à-mot le texte arabe. Quelques détails peuvent être, ici encore, notés. Le latin omet l'arabe *šinā* 'a dans l'expression *šinā* 'at *al-burhān* qui est simplement traduit par le pluriel neutre *demonstrativa*. Le latin omet également l'arabe *al-naẓar* (examen) dans l'expression *ta* 'āṭa *al-naẓar* (s'occuper de l'examen), puisque la traduction d'Hermann indique simplement *ambire*. Le latin omet de traduire la phrase *wa-yūḡad isti māluhumā muštarakan li-l-ḡamī* ' (et leur usage est associé à tout le monde), et emploie le verbe *se intromittere* pour rendre le simple *ista* 'mala du texte arabe. Le latin omet aussi l'arabe *wa-innamā kāna dālīka kaḍālīka li-annahū* (il n'en est ainsi que parce), et traduit par *artifex* (artisan) la périphrase arabe *aṣṇāf min al-nās* (des sortes de gens). La portion de phrase qui démontre le caractère général de la rhétorique et de la dialectique, ainsi que leur nature logique a été laissée de côté par Hermann. Enfin, le latin *modo aliquo* (d'une certaine façon) est plus proche du texte d'Aristote que du texte d'Averroès, et le latin *usquequo* semble traduire plutôt la version arabe de la *Rhétorique* (*fī-naḥū wa-ḥattā al-ṣay faqat*, d'une certaine façon et jusqu'à un certain point), plutôt que le texte d'Averroès *ilā miqdār mā* (jusqu'à un certain degré).

c. Adaptation

Enfin, Hermann procède à une adaptation des passages du Commentaire d'Averroès, dans la mesure où ce qu'il présente comme une citation du Cordouan n'est en réalité qu'une paraphrase approximative du texte arabe en latin. C'est le cas de la seule citation de l'**Annexe III 3**, destinée à souligner l'importance du rattachement de la rhétorique à la logique³⁰. La comparaison du Commentaire d'Averroès avec la « traduction » qu'en a réalisée Hermann indique de façon assez claire qu'il s'agit ici d'une adaptation plutôt que d'une traduction littérale :

• *CmRhét* (Aouad 1.1.13, p. 8)

وإذا كان الأمور هكذا فقد استبان أن قصور هؤلاء فيما تكلموا فيه من أمر الخطابة إنما كان من أجل أنه لم يكن عندهم علم بالمنطق وأن سائر من تكلم في الخطابة ومن يستعمل الأقاويل الخطابية فقط من غير أن يتقدموا فيعرفوا هذه الأشياء، التي هي عمود البلاغة، أنهم إنما يتكلمون في أشياء تجري من البلاغة

³⁰ Le passage d'Averroès, et la traduction / adaptation d'Hermann sont, dans ce passage, assez éloignés du texte grec original de la *Rhétorique* : « (...) l'examen du vrai et du semblable au vrai relève de la même capacité et, en même temps, les hommes sont par nature suffisamment doués pour le vrai et ils arrivent la plupart du temps à la vérité : en conséquence, celui qui a déjà l'aptitude à viser la vérité possède aussi l'aptitude à viser les opinions communes. Que les autres spécialistes se consacrent à ce qui est en dehors de la cause, et pourquoi ils se penchent avec prédilection sur la plaidoirie, voilà donc qui est évident » (*Rhét.* I, 1, 1355a14-20, trad. Chiron).

مَجْرَى التَّزْيِينِ وَالتَّنْمِيقِ، الَّذِي يَكُونُ فِي ظَاهِرِ الشَّيْءِ وَصَفَحَتِهِ، لَا فِي الْأَشْيَاءِ
الَّتِي تَتَنَزَّلُ مِنْهَا مَنْزِلَةٌ مَا بِهِ قَوَامُ الشَّيْءِ وَوُجُودِهِ، وَإِنْ كَانَ قَدْ يُظَنُّ بِمَا فَعَلُوا
مِنْ ذَلِكَ أَنَّهُمْ قَدْ بَلَّغُوا الْغَايَةَ مِنَ الْأَقَاوِيلِ الْإِقْنَاعِيَّةِ وَجَرَوْا فِي ذَلِكَ عَلَى طَرِيقِ
الصَّوَاتِ وَالْعَدْلِ.

« Puisqu'il en est ainsi, il est donc évident que la déficience de ces prédécesseurs, dans ce qu'ils ont dit de la rhétorique, ne provenait que de ce qu'il n'y avait pas chez eux de science de la logique et il est aussi évident que tous ceux qui ont parlé de la rhétorique, ainsi que tous ceux qui utilisent les propos rhétoriques seulement sans connaître auparavant ces choses, qui sont le pilier de l'éloquence, ne parlent que de choses se comportant, par rapport à l'éloquence, comme l'ornement et le fard, qui se produisent au niveau de l'apparence de la chose et de sa surface, et non des choses qui, par rapport à l'éloquence, ont le rang de ce par quoi la chose subsiste et existe, bien que l'on ait parfois l'opinion, à propos de ce que ces gens ont fait à cet égard, qu'ils ont atteint le plus haut degré des propos persuasifs et qu'ils ont en cela suivi la méthode qui vise juste et qui est juste ».

• *Rhét.* Hermann (I 1, 1355a 14-20)

« Averroes. Et non attingunt quod est tamquam constitutivum et essentielle rei, et si putentur per hoc^a incessisse via recta et justa, et quoniam ipsi declinant amplius^b ad hoc ut ratiocinentur justum tantum^c ».

^a hoc PF : hec T ^b declinant amplius PT : amplius declinant F ^c P *marg.* = F, 105v, 14-15 : In alio (F : uno) exemplari ut dicant (F : dicunt) dictionem secundum viam justum tantum

« Averroès. Et ils n'atteignent pas ce qui est pour ainsi dire constitutif de la chose et qui lui est essentiel, même si l'on considère pour cela qu'ils sont passés par une voie correcte et juste, et puisqu'eux-mêmes inclinent davantage à examiner le juste seulement ».

La version latine qu'Hermann propose ici d'Averroès est très approximative, et semble davantage procéder de la glose ou du résumé que de la traduction mot-à-mot. Les équivalences entre les termes arabe et latin sont donc peu nombreuses pour ce passage. Il semble que la dernière portion de phrase et *quoniam ipsi declinant amplius ad hoc ut ratiocinentur justum tantum* (et puisqu'eux-mêmes inclinent davantage à examiner le juste seulement) soit par ailleurs le fait d'Hermann, car il n'y a pas de correspondance, pour ce passage, chez Averroès.

2.3. Fonctions des citations

2.3.1. al-Fārābī

Les citations d'al-Fārābī par Hermann (citations de l'**Annexe II 1, 2, 3**) sont destinées à éclaircir et désambiguïser l'emploi de certains termes en explicitant les mots qui restent sous-entendus dans la version arabe de la *Rhétorique*.

Dans l'extrait de l'**Annexe II 1**, Hermann a sans doute choisi de recourir à al-Fārābī pour tenter d'éclairer le texte arabe de la *Rhétorique* :

Rhét. grecque (I 2, 1356b 34-1357a 4)

Καὶ γὰρ ἐκεῖνη συλλογίζεται οὐκ ἐξ ὧν ἔτυχεν (φαίνεται γὰρ ἅττα καὶ τοῖς παραπληροῦσιν), ἀλλ' ἐκεῖνη μὲν ἐκ τῶν λόγου δεομένοις, ἡ δὲ ῥητορικὴ ἐκ τῶν ἤδη βουλευέσθαι εἰωθόσιν. Ἔστι δὲ τὸ ἔργον αὐτῆς περὶ τε τοιούτων περὶ ὧν βουλευόμεθα καὶ τέχνας μὴ ἔχομεν, καὶ ἐν τοῖς τοιούτοις ἀκροαταῖς οἱ οὐ δύνανται διὰ πολλῶν συνορᾶν οὐδὲ λογίζεσθαι πόρρωθεν.

« Car celle-ci (sc. la dialectique) n'extrait pas ses syllogismes des premières propositions venues (même les gens qui divaguent ont leurs idées), elle part de propositions qui font débat, la rhétorique, elle, de propositions qui font habituellement déjà l'objet de délibération. L'activité de la rhétorique porte sur des questions sur lesquelles nous sommes amenés à délibérer et pour lesquelles nous ne possédons pas de technique ||; elle s'adresse à des auditeurs incapables d'atteindre à une vue d'ensemble par de nombreuses étapes et de raisonner depuis un point éloigné » (trad. Chiron).

Aristote caractérise dans ce passage ce qui constitue l'activité propre (ἔργον) de la rhétorique, et sa *materia* (son objet). Ces objets sont ceux sur lesquels on a coutume de délibérer et pour lesquels on ne possède pas d'arts particuliers qui pourraient nous guider sans que l'on doive recourir à la technique rhétorique : en d'autres termes, on délibère sur les choses qui peuvent être aussi bien d'une manière ou d'une autre.

Le traducteur arabe de la *Rhétorique* a cependant commis une erreur, ou en tout cas une omission, puisque les questions de la rhétorique, qui font objet de délibération et « pour lesquelles nous ne possédons pas de technique » (περὶ ὧν <...> τέχνας μὴ ἔχομεν) deviennent, en arabe, les « propos qui sont ainsi, c'est-à-dire ce dans quoi nous nous proposons de ne pas avoir d'art » (هكذا من الكلام،) (أي فيما قد نتعمد ولا تكون لنا فيه صناعة :

• *Rhét. arabe* (Lyons, p. 11. 8-16)

فإنَّها هي أيضًا تفعل السلجسة ليس من أي شيء كان، فإنَّ هذا النحوَّمًا قد نراه وقد ننطق بما شئنا وهوبنا، لكنَّ تلكَ يُحتاج فيها إلى ذوات المنطق، فأما الرِيطوريَّة فيُحتاج فيها إلى التي قد أعتيد قبولها والتصديق بها من قبل، فإنَّ عملها فيما كان هكذا من الكلام، أي فيما قد نتعمد الا تكون لنا فيه صناعة || وفي هذا النحو من السامعين، أي الذين لا يستطيعون أن يبصروا الأمور عن مراتب كثيرة ولا يفعل السلجسة من بعد.

«En effet, elle aussi (sc. la dialectique) produit les syllogismes non pas de n'importe quelle chose, car cette manière vient de ce que nous avons pour point de vue; or nous parlons de ce que nous voulons et désirons. Toutefois, on a besoin, dans celle-là, des choses possédant la logique, alors que, dans la rhétorique, on a besoin des choses que l'on admet et dont on est convaincu en fonction d'une habitude antérieure. Car son action concerne les propos qui sont ainsi, c'est-à-dire ce dans quoi nous nous proposons de ne pas avoir d'art³¹, || et cette sorte d'auditeurs, c'est-à-dire ceux qui sont incapables de voir les choses à partir de nombreux degrés et ne produisent pas le syllogisme à partir d'un point lointain».

C'est sans doute l'incongruité de cette formulation qui explique le recours à al-Fārābī par Hermann.

• *Rhét. Hermann* (I 2, 1356b 35-1357a 4)

«Neque etiam ipsa operatur sillogismus ex quacumque re contingit et hic^a quidem enim modus est ex hoc quod videmus et jam ratiocinamus per quod volumus et amamus, sed in illa indigetur logicalibus. In rethorica vero indigetur his^b quorum usitata est acceptio et quorum praehibita est credulitas. Etenim ejus operatio^c fit in eo quod est ut hoc ex sermone, id est in eo in quo intenditur non esse artem — Alpharabius: id est ordinem artificialem logices^d — et in isto modo auditorum, id est qui non valent percipere res ab ordinibus pluribus et non faciunt^e sillogismus ex longinquo».

^a hic P : hoc T ^b his P : hiis T ^c operatio P : comparatio T ^d id est ordinem artificialem logices om. T ^e faciunt P : fatiunt T

«Car elle (sc. la dialectique) ne met pas en œuvre de syllogisme à partir de n'importe quelle chose existante, et c'est certes là en effet le mode qui provient de ce que nous voyons et sur quoi nous raisonnons au moyen de ce que nous voulons et aimons, mais dans celle-là (sc. la rhétorique), on a besoin de <propositions> logiques. Mais dans la rhétorique on a besoin de choses dont l'acception est

³¹ En suivant le manuscrit : لا، et non l'émendation de Lyons ولا.

habituelle et dont la valeur persuasive a été acquise antérieurement. En effet, sa mise en œuvre se réalise dans ce qui provient comme cela du discours, c'est-à-dire dans ce dans quoi on vise à ne pas avoir d'art — al-Fārābī: c'est-à-dire l'ordre technique de la logique — et devant ce mode d'auditeurs, c'est-à-dire ceux qui ne sont pas capables de percevoir les choses à partir de nombreuses étapes et ne produisent pas de syllogisme depuis un point éloigné ».

En recourant à al-Fārābī, Hermann souhaite ainsi souligner que la rhétorique ne suit pas strictement l'ordre logique de composition des syllogismes, tels qu'ils sont décrits dans les *Analytiques* ou même dans les *Topiques*, mais que, du point de vue de leur matière comme de leur forme, les démonstrations de type rhétorique ne sont pas strictement logiques: elles omettent généralement une prémisse, parce que cette prémisse est fausse.

2.3.2. Averroès

Les citations d'Averroès, beaucoup plus longues que celles d'al-Fārābī, semblent assumer au moins trois fonctions: 1° compléter l'information, 2° expliquer et désambiguïser, et 3° remplacer le texte arabe de la *Rhétorique*, jugé trop obscur.

a. Compléter l'information

Tout d'abord, elles sont destinées à développer la pensée d'Aristote, même si le texte traduit de l'arabe ne présente *a priori* pas de difficultés (citations de l'**Annexe III 1, 2, 4, 6, 10**). Elles viennent donc fournir au lecteur de la *Rhétorique* comme un complément d'information, destiné à enrichir le contexte théorique du passage. S'apparentant à un commentaire, elles donnent plus de profondeur aux enjeux du traité d'Aristote en insistant généralement sur la valeur logique du traité, déjà soulignée dans le prologue à la traduction de la *Rhétorique*: la citation de l'**Annexe III 1** souligne ainsi le rapport entre la rhétorique et la dialectique; la citation de l'**Annexe III 2** insiste sur le rôle majeur joué par l'enthymème dans la rhétorique; la citation de l'**Annexe III 4** développe l'utilité de la rhétorique; la citation de l'**Annexe III 6** éclaire les rapports entre rhétorique, dialectique et sophistique; enfin, la citation de l'**Annexe III 10** énumère les différents types de hasards qui ont été identifiés par Aristote.

Je donne ici à titre d'exemple la citation de l'**Annexe III 4** de mon édition:

• *Rhét. grecque* (I 1, 1355a 21-25)

Χρήσιμος δὲ ἐστὶν ἡ ῥητορικὴ διὰ τε τὸ φύσει εἶναι κρείττω τὰ ληθῆ καὶ τὰ δίκαια τῶν ἐναντιῶν, ὥστε ἐὰν μὴ κατὰ τὸ προσήκον αἱ κρίσεις γίνωνται,

ἀνάγκη δι' αὐτὸν ἡττᾶσθαι τοῦτο δ' ἐστὶν ἄξιον ἐπιτιμῆσεως. Ἔτι δὲ πρὸς ἐνίους οὐδ' εἰ τὴν ἀκριβεστάτην ἔχοιμεν ἐπιστήμην, ῥάδιον ἅπ' ἐκείνης πεῖσαι λέγοντας.

« Mais la rhétorique est utile, d'abord parce que le vrai et le juste ont naturellement plus de force que leurs contraires; aussi, quand les décisions ne sont pas convenablement prises, est-ce nécessairement par sa propre faute que l'on est battu et cela mérite d'être blâmé. En outre, il y a de certaines personnes que, eussions-nous la science la plus exacte, nous ne saurions grâce à elle facilement persuader par nos discours » (trad. Chiron).

• *Rhét. arabe* (Lyons, p. 5. 9-14)

والريطوريّة ذات غناء ومنفعة، لأنّ الصادقة العادلات افضل في الطبيعة من اضدادها. ثمّ انه اذا لم تضبط الأحكام على ما ينبغي فالمرء فيها مغلوب مقهور لا محالة، وهذا امر يستحقّ التأنيب والتوبيخ. ثمّ ان من الناس صنفا ليس ينبغي ان نستعمل فيما بيننا وبينهم العلم الصحيح المستقصى

« La rhétorique est utile et bénéfique parce que les choses vraies et justes sont par nature meilleures que leurs contraires; ensuite, parce que si les jugements ne sont pas rendus comme il faut, l'homme concerné par ces <jugements> est nécessairement vaincu et subjugué, et cela mérite le blâme et le reproche; ensuite, parce qu'il existe une certaine classe d'hommes pour lesquels il nous est absolument impossible, entre eux et nous, d'utiliser la science vraie et exacte ».

• *CmRhét* (Aouad 1.1.14, p. 8)

قال: وللخطابة منفعتان. إحداهما أنّها تحثّ المديّنين على الأعمال الفاضلة وذلك أنّ الناس بالطبع يميلون إلى ضدّ الفضائل العادلة فإذا لم يُضبطوا بالأقاويل الخطبيّة غلبت عليهم أضداد الأفعال العادلة، وذلك شيء مذموم يستحقّ فاعلة التأنيب والتوبيخ، أعني الذي يميل إلى ضدّ الأفعال العادلة أو المدبّر الذي لا يضبط المديّنين بالأقاويل الخطبيّة على الفضائل العادلة.

« Aristote a dit: La rhétorique a deux utilités. L'une des deux est qu'elle incite les citoyens aux actions excellentes. En effet, les gens inclinent par nature vers le contraire des excellences justes (*al-faḍa'il al-ādila*); quand donc ils ne sont pas tenus fermement par les propos rhétoriques, ils sont vaincus par les contraires des actes justes (*ḡalabat 'alay-him addad al-af'āl al-ādila*); or cela est une chose blâmable dont l'agent mérite la réprimande et la remontrance, je veux dire celui qui incline vers le contraire des actes justes ou le dirigeant qui ne tient pas fermement les citoyens, par les propos rhétoriques, dans le cadre des excellences justes ».

• *Rhét.* Hermann (I 1, 1355a 21-25)

« Rethorica autem utilis est et proficiens eo quod veracia secundum justum meliora sunt suis contrariis. Quando etenim non fiunt iudicia contenta secundum quod oportet vincuntur ab his rebus necessario, et istud est res que meretur redargutionem et increpationem. Averroes. Rethorica duas habet utilitates quarum una est quod instigat cives ad operationes nobiles. Homines enim naturaliter^a proni sunt ad contrarium operationum justitie^b. Quando igitur^c non retinentur per sermones rhetoricos, vincunt eos^d illicita desideria et operantur contraria operibus justitie. Inquit interpres idem: veritates rerum operandarum pertinentium justitie sequende sunt et respuende falsitates desideriorum illicitorum, et ad has veritates conatur rhetorica et ad redargutiones et increpationes^e propter opposita. Deinde eo quod aliquis modus hominum contra quos in eo quod est inter nos et ipsos non oportet ut utamur scientia certa exquisita ».

^a naturaliter om. T ^b operationum justitie PT: justitie operationum F ^c igitur om. F ^d eos om. F ^e ad redargutiones et increpationes T: ad redargutiones et increpationes et redargutiones et increpationes P

« Or, la rhétorique est utile et profitable dans la mesure où les choses vraies et conformes à la justice, sont meilleures que leurs contraires. En effet, quand les jugements ne sont pas rendus comme il faut, on est nécessairement vaincu par ces choses, et c'est là une chose qui mérite le blâme et le reproche. Averroès. La rhétorique a deux utilités, dont l'une est qu'elle pousse les citoyens vers les actions vertueuses. Les hommes sont en effet enclins par nature au contraire des actions de la justice. Quand donc ils ne sont pas fermement tenus par les propos rhétoriques, les désirs illicites les vainquent et ils exercent les actes contraires à la justice. Le même interprète dit: les vérités des actions relevant de la justice doivent être poursuivies, et doivent être rejetés les mensonges des désirs illicites, et c'est vers ces vérités que tend la rhétorique, ainsi que vers les réprimandes et les remontrances à cause des actes opposés à la justice. Ensuite, parce qu'il existe un certain mode d'hommes contre lesquels, dans les situations qui nous opposent à eux, il ne convient pas que nous utilisions la science vraie et exacte ».

La comparaison de la version arabe de la *Rhétorique* et de sa traduction latine par Hermann indique que le traducteur a traduit la totalité du texte arabe et que cette traduction n'a pas posé problème. Mais il a toutefois choisi d'y insérer, en outre, la citation d'Averroès, afin de développer l'idée qui est ici abordée par le Stagirite, peut-être d'une façon trop rapide.

b. Expliquer et désambigüiser

D'autres citations (citations de l'**Annexe III 5, 7, 8, 9, 11, 13, 14**) visent à rendre le texte plus clair et plus compréhensible, en procédant à des explications, voire en proposant des explications.

L'exemple le plus éloquent est à ce titre celui de la citation de l'**Annexe III 14**, où Hermann explique lui-même la raison pour laquelle il a recouru à une citation. Le texte d'Aristote dans la version arabe est tellement obscur dans son expression qu'il avoue s'être rapporté à Avicenne et Averroès. Le passage se situe dans l'énumération des biens :

• *Rhét.* grecque (I 6, 1363a 11-19)

Καὶ ὁ οἱ ἐχθροὶ καὶ οἱ φαῦλοι³² ἐπαινοῦσιν· ὥσπερ γὰρ πάντες ἤδη ὁμολογοῦσιν, καὶ ὁ οἱ κακῶς πεπονθότες· διὰ γὰρ τὸ φανερόν ὁμολογοῦεν ἄν. Ὡσπερ καὶ φαῦλοι οὗς οἱ φίλοι ψέγουσι, καὶ [ἀγαθοὶ] οὗς οἱ ἐχθροὶ μὴ ψέγουσιν. Διὸ λελοιδωρήσται ὑπέλαβον Κορίνθιοι ὑπὸ Σιμωνίδου ποιήσαντος 'Κορινθίοις δ' οὐ μέμφεται τὸ Ἴλιον'. Καὶ ὁ τῶν φρονίμων τις ἢ τῶν ἀγαθῶν ἀνδρῶν ἢ γυναικῶν προέκρινεν, οἷον Ὀδυσσεύα Αἰθηνᾶ καὶ Ἑλένην Θησεὺς καὶ Ἀλέξανδρον αἱ θεαὶ καὶ Ἀχιλλεὺς Ὀμηρος.

« Et aussi ce que louent nos ennemis et les méchants, car à ce moment-là, on a l'équivalent d'un accord unanime ; et aussi ce que louent même ceux qui ont été victimes car il est probable que cet aveu leur est inspiré par l'évidence ; de même que sont mauvais ceux que blâment leurs amis, de même <ne> sont <pas> bons ceux que ne blâment pas leurs ennemis. C'est pour cela que les Corinthiens se sont crus insultés par le poème de Simonide : 'Ilion n'en veut pas aux Corinthiens...'. Est aussi un bien ce qui a suscité la préférence d'un être prudent ou d'un homme ou d'une femme de valeur, par exemple celle d'Athéna pour Ulysse, de Thésée pour Hélène, des déesses pour Alexandre et d'Homère pour Achille » (trad. Chiron).

• *Rhét.* arabe (Lyons, p. 31. 13-19)

والأصدقاء والأعداء والأشرار يعترفون بالخير لكن الذين اضر بهم الضرر الشديد يقرّون بالخير لأنّه يرى ظاهراً، والأعداء ايضاً فليس يستطيعون نفيه وجحوده. ثمّ من تقدّم فاختر انسان من العقلاء او من الخيار من الرجال والنساء كما اختار اوميروس ادوسوس الاثيني والانى والاسكندر واخلس.

« Les amis, les ennemis et les méchants reconnaissent le bien, mais ceux qui ont subi un grand dommage reconnaissent le bien parce qu'il se voit de façon évidente, et les ennemis non plus ne peuvent pas le nier et le contester. Enfin, celui qui précéda et choisit un homme³³ parmi les sages ou parmi les hommes de bien, parmi les hommes ou les femmes, tout comme Homère choisit Ulysse l'Athénien, Hélène, Alexandre et Achille ».

³² Les mots καὶ οἱ φαῦλοι sont supprimés par Kassel dans son édition, mais la version qui a été traduite en arabe contenait bien ces mots — ou leurs équivalents en syriaque si la traduction a été réalisée à partir du syriaque.

³³ En lisant انسانا au lieu de انسان.

• *Rhét.* Hermann (I 6, 1363a 11-19)

«Amici autem et inimici et maligni consentiunt in bonum. Attamen cum infertur eis dampnum eximium et vehemens et si quidem doleant de dampno assentiunt tamen bono propterea quod ipsum est in propaculo et inimici etiam non possunt resistere et negare ipsum. -> Dixit translator. In hoc passu invenimus textum Aristotilis vel ita corruptum vel decurtatum vel forte in se obscurum quod sententiam plane intelligibilem ex eo elicere non potuimus. Vnde visum fuit verbum ex verbo transferre et post ipsum ad ejus elucidationem textum Aviscenne ex libro suo Asschiphe subungere usque ad finem capituli. Inquit Aristotilis. Istud est commentum et debebat esse in margine sed non potuit. Averroes^a. Et^b ex inceptivis beneficiis valde^c conferentibus et ex actibus quorum magna reputatur^d quantitas apud eos erga quos talia exercentur est ut eligat quis virum quempiam magne potentie ex aliqua gente nota habentem^e inimicum similiter magne potentie ex gente altera, et extollat virum illum et sibi pertinentes laudibus et beneficiis quibus potuerit^f; inimicum vero et sibi pertinentes deprimit^g et mala que potuerit exaggregat^h erga ipsum prout accidit Homero poete cum Grecis et inimicis eorum. Grecos enim et magnates eorum et qui ex parte ipsorum erant magnificavit laudibus, et extulit carminibus durabilibus in sempiternum. Alios vero scilicet ipsorum adversarios submersit vituperiis que nulla umquam absterget oblivio in facto proelii quod olim habitum est inter ipsos. Greci igitur Homerum quasi pro viro deificato receperunt et pro summo doctore habuerunt. Et ut in summa dicaturⁱ malum inferre inimicis et bonum conferre amicis de rebus valde utilibus reputatur. Deinde qui antecedit et eligit ex viris aut ex feminis quemadmodum elegit homerus orosium atheniensem et Elenam et Alexandrum et Achillem ».

^a averroes P : aviscenne T ^b et om. T ^c valde T : vadit PF ^d magna reputatur PF : magnificare putatur T ^e habentem P : habente TF ^f potuerit PT : potuit F ^g deprimit PT : deprimit F ^h exaggregat PT : exagerat F ⁱ dicatur FP : dicens T

« Or les amis, les ennemis et les méchants s'accordent sur le bien. Toutefois, lorsqu'on leur inflige un dommage excessif et violent, et s'ils se plaignent du dommage, ils donnent toutefois leur assentiment au bien, parce qu'il est lui-même exposé à la vue de tout le monde, et même les ennemis ne peuvent lui résister et le nier. Le traducteur dit : dans ce passage, nous trouvons que le texte d'Aristote est soit corrompu, soit mutilé, soit peut-être obscur en lui-même, parce que nous n'avons pas pu en tirer une phrase tout à fait intelligible. Aussi avons-nous décidé de traduire mot-à-mot et, à la suite <de cette traduction> joindre, en vue de son élucidation, le texte du livre d'Avicenne *al-Šifa* ' jusqu'à la fin du chapitre. Aristote dit. Voilà le commentaire et il devait figurer dans la marge, mais je n'ai pas pu <l'y inscrire>. Averroès. Et parmi les bienfaits initiaux qui sont très utiles et les actes dont la quantité est estimée imposante par ceux envers qui de tels bienfaits sont prodigués, il y a le fait que quelqu'un choisisse un homme d'un grand pouvoir,

issu d'une nation réputée, ayant un ennemi, d'un grand pouvoir également, issu d'une autre nation, et qu'il distingue cet homme et les siens par des louanges et des bienfaits qu'il peut, et qu'il rabaisse au contraire son ennemi et les siens et lui réserve les maux qu'il peut, comme c'est arrivé au poète Homère avec les Grecs et leurs ennemis. Il magnifia en effet les Grecs, leurs chefs et ceux qui étaient de leur côté au moyen de louanges, et les distingua pour toujours dans ses vers durables. Mais les autres, leurs adversaires, il les noya dans des blâmes qu'aucun oubli jamais ne dissiperait, dans le fait du combat qui s'est tenu entre eux. Les Grecs estimèrent donc Homère comme un homme divin et le tinrent pour le plus grand savant. Et, pour le dire en un mot, faire du mal aux ennemis et du bien aux amis est compté parmi les choses qui sont très utiles. Ensuite, celui qui précède et choisit, parmi les hommes ou les femmes, tout comme Homère choisit l'Athénien Orosius, Hélène, Alexandre et Achille ».

Un exemple d'explicitation est donné en revanche dans la citation de l'**Annexe III 5**, qui s'insère dans un contexte où Aristote évoque l'utilité de la rhétorique, laquelle est capable de persuader d'une chose et de son contraire :

• *Rhét. grecque* (I 1, 1355a 29-33)

Ἔτι δὲ τὰναντία δεῖ δύνασθαι πείθειν, καθάπερ καὶ ἐν τοῖς συλλογισμοῖς, οὐχ ὅπως ἀμφοτέρω πράττωμεν (οὐ γὰρ δεῖ τὰ φαῦλα πείθειν), ἀλλ' ἵνα μήτε λανθάνῃ πῶς ἔχει καὶ ὅπως ἄλλου χρωμένου μὴ δικαίως τοῖς λόγοις αὐτοὶ λῶειν ἔχωμεν.

« En outre, il faut être capable de persuader des thèses contraires, comme aussi dans les syllogismes, non pour soutenir effectivement l'une et l'autre (car il ne faut pas persuader de ce qui est mal) mais pour que le procédé ne nous échappe pas et afin que, si quelqu'un d'autre use des discours à des fins injustes, nous soyons nous-mêmes en état de le réfuter » (trad. Chiron).

• *Rhét. arabe* (Lyons, pp. 5. 21 - 6. 1)

وقد يمكن الإقناع في المتضادين، كما يمكن السليسة، فأنما قد نقنع على ذى الجناية ليس لنعقد الأمرين جميعاً بل لكيلا يخفى علينا المذهب فى ذلك وكيف نستطيع اذا المتكلم تكلم بغير العدل ان ننقص عليه .

« La persuasion des contraires est possible, de même que la syllogistique est possible, car nous ne persuadons qu'au sujet du coupable non pas pour lier les deux choses ensemble, mais pour que nous n'ignorions pas la méthode, en cela, et <que nous n'ignorions pas> la façon dont, si l'orateur a parlé contre la justice, nous pouvons le contredire ».

- *CmRhét* (Aouad 1.1.17, p. 9)

وذلك أنا قد نَقَنع في ذي الجاني أنه أساء وأنه لم يُسِء . ولست أعني أنا نفعل
الأمرين جميعاً في وقت واحد بل نفعل هذا في وقت وهذا في وقت بحسب
الأنفع وذلك أنه كثيراً ما يكون الشيء نافعاً في وقت وضده نافعاً في وقت آخر .

« ...En effet, nous persuadons parfois au sujet du coupable qu'il a fait du tort et qu'il n'en a pas fait. Je ne veux pas dire que nous faisons les deux choses ensemble, en même temps, mais nous faisons ceci en une temps et cela en un autre temps, selon ce qui est le plus utile, car souvent la chose est utile en un temps, et son contraire inutile en un autre temps ».

- *Rhét.* Hermann (I 1, 1355a 29-33)

« Et est possibilis persuasio in duobus contrariis sicut possibilis est sillogizatio. Averroes. Pecasse ipsum et non peccasse, sed non hec duo simul, sed modo hoc^a modo illud. Aristoteles. Nos enim interdum persuademus de flagitioso non ut connectamus utrasque res simul, sed ut non lateat nos via in hac et qualiter possimus quando quis locutus fuerit id quod preter justum est et contradicere ei ».

a hoc P : hec T

« Et la persuasion est possible dans les deux contraires, de même que la syllogistique est possible. Averroès. Qu'il a failli et n'a pas failli, mais non ces deux choses en même temps, mais tantôt l'une, tantôt l'autre. Aristote. En effet, nous persuadons tantôt au sujet du coupable non pas pour lier les deux choses en même temps, mais pour que nous n'ignorions pas la méthode en cela et <que nous n'ignorions pas> la façon dont, quand quelqu'un aura dit quelque chose qui n'est pas juste, nous pourrions aussi le contredire ».

Même si la traduction arabe de la *Rhétorique* n'est pas fidèle au grec original, la comparaison de la version arabe avec la traduction d'Hermann indique que le latin a rendu compte de la totalité du texte arabe sans problème apparent. Hermann a choisi ici de recourir à une citation du Commentaire d'Averroès pour expliciter et souligner, tout en l'illustrant, l'idée qu'il ne s'agit pas, en rhétorique, de soutenir une thèse et son contraire, mais d'être simplement dans la capacité de le faire, selon le moment.

c. Remplacer

Enfin, Hermann a recouru dans un seul cas à une citation (citation de l'**Annexe III 3**) qui vient remplacer le texte arabe de la *Rhétorique*, jugé trop obscur pour pouvoir être traduit en latin. Dans cette citation de l'**Annexe III 3**,

c'est la comparaison des versions arabe et latine qui permet de déterminer qu'il y a eu remplacement d'un passage de la version arabe de la *Rhétorique* par une citation d'Averroès.

Le passage de la *Rhétorique* en question établit, dans sa version originale grecque, que l'examen du vrai et du vraisemblable relève de la même capacité, et que la nature des hommes les fait pencher généralement du côté de la vérité :

• *Rhét.* grecque (I 1, 1355a 17-22)

Διὸ πρὸς τὰ ἑνδοξα στοχαστικῶς ἔχειν τοῦ ὁμοίως ἔχοντος καὶ πρὸς τὴν ἀλήθειαν ἐστίν. Ὅτι μὲν οὖν τὰ ἔξω τοῦ πράγματος οἱ ἄλλοι τεχνολογοῦσι, καὶ διότι μᾶλλον ἀπονενευκάσι πρὸς τὸ δικολογεῖν, φανερόν· χρήσιμος δὲ ἐστὶν ἡ ῥητορικὴ διὰ τε τὸ φύσει εἶναι κρείττω τάληθῃ καὶ τὰ δίκαια τῶν ἐναντίων.

« Car l'examen du vrai et du semblable au vrai relève de la même capacité et, en même temps, les hommes sont par nature suffisamment doués pour le vrai et ils arrivent la plupart du temps à la vérité : en conséquence, celui qui a déjà l'aptitude à viser la vérité possède aussi l'aptitude à viser les opinions communes. Que les autres spécialistes se consacrent à ce qui est en dehors de la cause, et pourquoi ils se penchent avec prédilection sur la plaidoirie, voilà donc qui est évident ».

Toutefois, la traduction arabe se révèle très fautive et incompréhensible :

• *Rhét.* arabe (Lyons, p. 5. 5-10)

والحمودات قد تدخل في علم الحق من قبل أنها شبيهة به : فقد استبان إذا أن هؤلاء إنما يزخرفون القول في صفحة الأمر وظاهره وأنهم مالوا بزيادة الى أن ينطقوا بالعدل فقط . والربطورية ذات غناء ومنفعة ، لأن الصادقات العادلات افضل في الطبيعة من اضدادها .

« Les choses vraisemblables entrent dans la science de la vérité du fait qu'elles lui ressemblent : il est donc évident que ceux-ci ornent le propos dans la surface de la chose et son apparence, et que ces gens-là inclinent la majeure partie du temps à préférer uniquement des paroles justes. La rhétorique est utile et bénéfique parce que les choses vraies et justes sont par nature meilleures que leurs contraires ».

Aussi Hermann a-t-il tout simplement supprimé le passage (ici souligné) — si l'on accepte toutefois qu'Hermann ait travaillé à partir d'une copie proche de celle du *Parisinus* 2346 — pour le remplacer directement par la glose d'Averroès :

- *Rhét.* Hermann (I 1, 1355a 17-22)

« Probabilia autem ingrediuntur scientiam veri ex hoc quod assimilatur ei. Patet igitur quoniam illi picturant orationem^a in superficie rei et ejus apparentia. Averroes. Et non attingunt quod est tamquam constitutivum et essentielle rei, et si putentur per hoc^b incessisse via recta et justa, et quoniam ipsi declinant amplius^c ad hoc ut ratiocinentur justum tantum^d. Rethorica autem utilis est et proficiens eo quod veracia secundum justum meliora sunt suis contrariis ».

^a orationem correxī : orationi mss. ^b hoc PF : hec T ^c declinant amplius PT : amplius declinant F ^d P marg. = F, 105v, 14-15 : In alio (F : uno) exemplari ut dicant (F : dicunt) dictionem secundum viam justī tantum

« Or, les choses probables entrent dans la science du vrai, du fait qu'elles lui ressemblent³⁴. Il est donc évident qu'ils dépeignent leurs discours dans la surface de la chose et son apparence. Averroès. Et ils n'atteignent pas ce qui est pour ainsi dire constitutif de la chose et qui lui est essentiel, même si l'on considère pour cela qu'ils sont passés par une voie correcte et juste, et puisqu'eux-mêmes inclinent davantage à examiner le juste seulement. Or, la rhétorique est utile et profitable dans la mesure où les choses vraies et conformes à la justice, sont meilleures que leurs contraires ».

CONCLUSION

Comme il l'a indiqué dans le prologue à sa traduction de la *Rhétorique*, Hermann vise ici à ne fournir qu'une traduction provisoire, destinée à être améliorée et corrigée — dans le meilleur des cas, à être remplacée par une nouvelle traduction qui serait réalisée à partir de l'original grec.

C'est donc dans cette perspective qu'il convient de dégager la fonction de ces citations, selon le type de commentaires dont elles sont extraites. D'une part, les citations extraites du Grand commentaire d'al-Fārābī interviennent généralement dans la traduction arabo-latine de la *Rhétorique* pour en expliciter certains termes obscurs ou sous-entendus : la perspective propre du Grand commentaire, qui procède en citant chaque lemme puis en en explicitant chaque terme dans son intégralité, permet aisément ce genre de recours. D'autre part, les passages plus ou moins longs, plus ou moins fidèles, extraits du Commentaire moyen d'Averroès visent, sans toutefois se substituer à la traduction d'Hermann (sauf dans un seul cas), non seulement à compléter le sens du texte en l'éclairant

³⁴ Hermann a conservé le singulier dans sa traduction latine, alors que le pluriel neutre *probabilia* aurait demandé en latin un accord au pluriel. C'est bien ces *probabilia* qui sont le sujet de *assimilatur* (voir le texte arabe).

pour souligner la valeur logique de la rhétorique, mais aussi à élucider le sens d'un passage qui n'est pas assez clair.

Les passages d'al-Fārābī et d'Averroès qu'Hermann a intégrés dans sa traduction de la version arabe de la *Rhétorique* proviennent respectivement des chapitres 2, 12 et 15, et 1, 4, 5 et 6 du livre I. Autrement dit, Hermann n'a eu recours à ces passages que pour la traduction de la première moitié du livre I de la *Rhétorique* aristotélicienne. Est-ce à dire qu'il s'agit là des chapitres qui ont posé le plus de difficultés à Hermann, parce qu'il ne comprenait pas l'arabe du texte qu'il traduisait ? Considérerait-il ces premiers chapitres comme les plus importants et les plus décisifs de la *Rhétorique*, et par conséquent destinés à être explicités au maximum ? Ne disposait-il, alors, que du début de ces deux Commentaires — mais l'indication d'Hermann lui-même, précisant que le Commentaire d'al-Fārābī s'arrête au chapitre 9 du livre III semblerait réfuter cette dernière hypothèse. En tout état de cause, ces questions pourront être convenablement éclaircies une fois qu'aura été menée l'étude des citations d'Avicenne dans la traduction arabo-latine de la *Rhétorique*.

ANNEXES

I. <PROLOGUE D'HERMANN> À LA TRADUCTION ARABO-LATINE DE LA RHÉTORIQUE

Capitulum prohemiale in elucidationem sequentis operis. Inquit Hermannus Alemannus. Opus presentis translationis rethorice Aristotilis et eius poetrie ex arabico eloquio in latinum iamdudum intuitu venerabilis patris Johannis Burgensis
 5 episcopi et regis castelle cancellarii inceperam. Sed propter occurrentia impedimenta usque nunc non potui consummare. Suscipiant ergo ipsum latini precipui inter ceteras nationes secundum statum presentis temporis zelatores et cultores partis philosophie rationalis, ut estimo: ut sic habeant complementum logici negotii secundum Aristotelis intentionem. Quod autem hi duo libri logicales sint, nemo
 10 dubitat qui perspexerit libros Arabum famosorum, Alfarabii videlicet et Avicenne et Avenrosdi et quorundam aliorum. Imo ex ipso textu manifestius hoc patebit. Neque excusabiles sunt, ut fortassis alicui videbitur, propter Marcii Tullii rethoricam et Oratii poetriam. Tullius namque rethoricam partem civilis scientie posuit et secundum hanc intentionem eam potissime tractavit. Oratius vero poetriam prout
 15 pertinet ad gramaticam potius expedivit. Verumptamen dictorum virorum scripta non minimum utilia sunt ad opera presentia intelligendum. Nec miretur quisquam vel indignetur de difficultate vel quasi ruditate translationis. Nam multo difficilius et rudius ex greco in arabicum est translata, ita quod Alfarabius qui primus conatus est ex rethorica aliquem intellectum glosando elicere, multa exempla greca propter
 20 ipsorum obscuritatem pertransiens derelinquit. Et propter eandem causam multa dubie exposuit; et ut Avicenna et Avenrosd estimant propter hanc etiam causam glosam usque ad finem negotii non perduxit. Et isti quoque duo viri in finibus tractatum suorum, quos imitantes Aristotelem composuerunt, sic inquirunt. Hoc est quod intelligere et excipere potuimus de translatione que pervenit ad nos
 25 horum voluminum Aristotelis. Ideoque usque hodie etiam apud arabes hi duo libri quasi neglecti sunt, et vix unum invenire potui qui mecum studendo in ipsis vellet diligentius laborare. Veniam igitur concedant qui forsitan non immerito poterunt hunc meum laborem de imperfectione redarguere. Et si eis non placuerit quicquam fructus ex eo querere, possunt ipsum deserere redargutum. Sane tamen ipsis
 30 consulo ut malint hos codices habere sic translatos, quam penitus derelictos. Nichil enim pura privatione incultius, sed potest quoquomodo hiis habitis per paulatina incrementa finis tandem desiderate perfectionis facilius impertiri, quemadmodum contingit in libro Nichomachie quem latini Ethicam Aristotelis appellant. Nam et hunc prout potui in latinum verti eloquium ex arabico. Et postmodum reverendus

2 capitulum...sequentis operis *om.* T || inquit P: inquit T 6 consummare P: consumari? T 8 philosophie P: phisice T 9 aristotelis P: aristotilis T || hi P: hii T 10 perspexerit libros arabum famosorum P: libros arabum prospexerit T 11 avicenne P: aviscenne T || averrosdi P: avenrosd T || hoc P: hic T 15 potius P: pocius T 20 derelinquit P: dereliquit T 21 avicenna P: aviscenna T || averrosd P: avenrosdi T 23 aristotelem P: aristotilis T 24 excipere P: excerpere T 25 aristotelis P: aristotilis T || hi P: hii T 27 forsitan P: forsitam T || immerito P: in merito T 31 hiis *om.* P 33 aristotelis appellant P: appellant aristotilis T

pater magister Robertus Grossi capitis sed subtilis intellectus Lincolniensis 35
episcopus ex primo fonte unde emanaverat, greco videlicet, ipsum est completius
interpretatus et grecorum commentis proprias annectens notulas commentatus.
Sic, si totius scientie largitori placuerit, contingere poterit in his opusculis
primordialiter a nobis, etsi debiliter, elaboratis, quod ipse patrare dignetur qui
vivit et regnat eternaliter in perfecta trinitate. Amen. 40

Laborem vero distinguendi tres tractatus libri hujus principales in suas
differentias maiores et illas maiores in suas subdistinctiones minores quo ad usque
ad ultimas particulas perveniatur doctoribus derelinquo. Omnia hec enim in glosa
super hunc librum exquisite Alfarabius pertractavit. Cuius glose plus quam duos 45
quinternos ego quoque transtuli in latinum. Ex hinc ergo memorata distinctio
requiratur et libri marginibus ascribatur.

35 lincolniensis T : linkoniensis P 36 completius P : conpletius T 38 totius P : tocius T ||
his P : hiis T 37 primordialiter P : premordialiter T || patrare P : prestare T 43 hec enim P :
enim hec T 46 liber P : libri T

II. FRAGMENTS ET TÉMOIGNAGES D'AL-FĀRĀBĪ³⁵

1. *Rhet.* I 2, 1356b 35-1357a 4 (Lyons, p. 11. 8-16)

Neque etiam ipsa operatur sillogismum ex quacumque re contingit et hic quidem
enim modus est ex hoc quod videmus et jam ratiocinamus per quod volumus et
amamus, sed in illa indigetur logicalibus. In rethorica vero indigetur his quorum
usitata est acceptio et quorum praehibita est credulitas. Etenim ejus operatio fit 5
in eo quod est ut hoc ex sermone, id est in eo in quo intenditur non esse artem —
Alpharabius: id est ordinem artificialem logices — et in isto modo auditorum, id est
qui non valent percipere res ab ordinibus pluribus et non faciunt sillogismum ex
longinquo.

2. *Rhet.* I 12, 1372b 1-8 (Lyons, p. 62. 19-63. 6) 10

Et illi quos non consequitur restitutio eorum quorum habuerunt utilitatem ut
putatur in guerris et ceteris translationibus et illi quos famosos reddit et laudabiles
injuriam, quemadmodum jam accidit cum quis sumpsit vindictam sanguinis suorum
in deceptione pariter patrum et matrum aliorum quemadmodum fecit talis;
dispendia autem seu dampna sunt aut in pecunia aut in effugando in exilium aut in 15
consimilibus his. Injuriatur autem in utrisque rebus simul et hoc invenitur secundum

2 hic P : hoc T 4 his P : hiis T 5 operatio P : comparatio T 7 id est ordinem artificialem
logices om. T 8 faciunt P : fatiunt T 14 deceptione *correx*i : receptione PT 16 his P : hiis T
|| hoc om. P

³⁵ Voir WOERTHER, *Les traces du Grand Commentaire d'al-Fārābī à la Rhétorique d'Aristote dans la traduction arabo-latine de la Rhétorique d'Aristote par Hermann l'Allemand cit.*

duos modos — Alfarabius: vel in non reddendo vel in efferendo. Non autem est hoc in istis solummodo, sed etiam in eorum contrariis secundum mores, ...

3. *Rhet.* I 15, 1377a 8-11 (Lyons, p. 79. 5-9)

- 20 Iuramenta autem quadripartita sunt sive usitantur gratia quatuor partium. Aut enim ut Alfarabius: «jurans» det quod dimittit et aliud accipiat, aut ut non faciat unum istorum duorum, aut ut faciat illud et non faciat istud; deinde modus iste bipartitur: aut enim ut det et non accipiat, aut ut accipiat et non det.

4. *Rhet.* I 15, 1377a 15-19 (Lyons, p. 79. 14-18)

- 25 Ponamus ergo quod iuramentum fiat in pecunia et quod si fuerit hoc iurabit quod sic [scilicet dicens utique] et hoc potius est — hoc dimisit Alfarabius — et quod timuerint ne iuramentum fiat de nichilo propterea quod quando jurat, tunc pertinebit ei et quando non jurat tunc non. Istud ergo nunc non est nisi propter probitatem, non propterea quod pejeret aut transgrediatur iuramentum.

- 30 5. ad *Rhet.* III 9, 1409a 24

Huc pervenit glosa alfarabi.

18 in efferendo *correx*i: in auferendo T in non auferendo P 20 quadripartita T: quadripartita P 21 aliud P || faciat P: fatiat T 22 faciat¹⁻² P: fatiat T 23 bipartitur P: bipartitur T || ut¹⁻² P: non T 26 *scilicet dicens utique* est probablement une addition de la part d'Hermann, puisque cette portion de phrase n'a pas de correspondant dans le texte arabe et est introduite par *scilicet* || alfarabius P: alfarabius T 29 iuramentum P: iuramentum T

III. CITATIONS D'AVERROÈS³⁶

1. *Rhet.* I 1, 1354a 1-6 (Lyons, p. 1. 3-8)

- 5 Rethorica quidem convertitur arti topice et utreque sunt unius rei gratia et communicant in aliquo modorum et invenitur utrarumque noticia omnibus cum neutra ipsarum sit aliqua scientiarum separatim sive singulariter. Et hinc est quod omnes scientie inveniuntur communicare eis in modo. Avenroes. Ambe enim intendunt unum finem, et est sermo ad alterum. Non enim utitur eis homo ad se ipsum, ut est in demonstrativis, sed tantum ad alterum, et conveniunt quodam

³⁶ Voir WOERTHER, *Les citations du Commentaire moyen à la Rhétorique d'Aristote par Averroès dans la traduction arabo-latine de la Rhétorique d'Aristote par Hermann l'Allemand cit.*

modo in subjecto uno. Ambiunt enim omnia et omnes homines intromittunt se naturaliter de sermonibus topicis et rhetoricis: neutra ergo harum est separatim et singulariter scientia. Quelibet enim scientia certum et proprium habet subjectum et proprium artificem, et quilibet hominum modo aliquo et usquequo utitur rethoricalibus, accusatione videlicet et defensione, et ceteris que circa particularia existunt. Aristoteles. In sermone de liberatione et commendatione. Omnes igitur homines modo aliquo et usquequo utuntur et accusatione et recusatione. 10

2. *Rhet.* I 1, 1354b 19-22 (Lyons, p. 3. 17-22) 15

Ipsi enim per hec nichil amplius acquirere faciunt quam quod notificant qualiter convertatur iudex ad dispositionem animi. De credulitatibus vero que fiunt per artem et qualiter fiant non enuntiant quippiam et hoc quidem fit quidem ex parte enthymematum. Averroes. Et quoniam nos videmus enthymemata columnam hujus artis esse, credimus orationem rhetoricam que est in contentionibus et litigiis ante iudices et eam que est in deliberationibus uni et eidem arti pertinere, et est ars ista. Illos autem consequemur necessario ut non sit hec ars nisi de judiciali genere cause tantum, nec de hoc toto, sed de viliore parte ipsius, scilicet de hoc quod forensi strepitu ante tribunal iudicum litigatorie tractatur. De condendis autem legibus et iuribus statuendis in nullo profecerunt per ea que conscripserunt de hac arte. Habere autem usum rerum que quasi extrinsecus aminiculantur ad artem et non earum que intrinsece sunt et essentielles arti, illaudabile est. Et propter hoc est quod nos dicimus quoniam ars in deliberatione et in contentione una est. 20
25

3. *Rhet.* I 1, 1355a 17-22 (Lyons, p. 5. 5-10)

Probabilia autem ingrediuntur scientiam veri ex hoc quod assimilatur ei. 30
Patet igitur quoniam illi picturant orationem in superficie rei et ejus apparentia. Averroes. Et non attingunt quod est tamquam constitutivum et essentielle rei, et si putentur per hoc incessisse via recta et justa, et quoniam ipsi declinant amplius ad hoc ut ratiocinentur justum tantum. Rethorica autem utilis est et proficiens eo quod veracia secundum justum meliora sunt suis contrariis. 35

8 subjecto PF: facto T 9 et PF: in T 20 hujus artis esse P: esse hujus artis TF || litigiis FP: litigiis cum T 22 consequemur PT: consequimur F || ut PT: ubi F || hec ars PT: ars F 24 iudicum PT: iudicis F 25 autem legibus et iuribus statuendis om. T || conscripserunt PT: scripserunt F 27 que quasi extrinsecus aminiculantur ad artem et non earum que intrinsece sunt P: que quasi extrinsecus aminiculantur ad artem et non earum que intrinsece sunt T, que intrinsece sunt F 31 orationem *correx*i: orationi *mss.* 33 hoc PF: hec T || declinant amplius PT: amplius declinant F 34 P *arg.* = F, 105v, 14-15: In alio (F: uno) exemplari ut dicant (F: dicunt) dictionem secundum viam iusti tantum

4. *Rhet.* I 1, 1355a 21-25 (Lyons, p. 5. 9-14)

Rethorica autem utilis est et proficiens eo quod veracia secundum justum meliora sunt suis contrariis. Quando etenim non fiunt iudicia contenta secundum quod oportet vincuntur ab his rebus necessario, et istud est res que meretur
 40 redargutionem et increpationem. Averroes. Rhetorica duas habet utilitates quarum una est quod instigat cives ad operationes nobiles. Homines enim naturaliter proni sunt ad contrarium operationum justitie. Quando igitur non retinentur per sermones rhetoricos, vincunt eos illicita desideria et operantur contraria operibus justitie. Inquit interpret idem: veritates rerum operandarum pertinentium justitie
 45 sequende sunt et respuende falsitates desideriorum illicitorum, et ad has veritates conatur rhetorica et ad redargutiones et increpationes propter opposita. Deinde eo quod aliquis modus hominum contra quos in eo quod est inter nos et ipsos non oportet ut utamur scientia certa exquiritur.

5. *Rhet.* I 1, 1355a 29-33 (Lyons, pp. 5. 21-6. 1)

50 Et est possibilis persuasio in duobus contrariis sicut possibilis est sillogizatio. Averroes. Pecasse ipsum et non peccasse, sed non hec duo simul, sed modo hoc modo illud. Aristoteles. Nos enim interdum persuademus de flagitioso non ut connectamus utrasque res simul, sed ut non lateat nos via in hac et qualiter possimus quando quis locutus fuerit id quod preter justum est et contradicere ei.

55 6. *Rhet.* I 4, 1359b 8-14 (Lyons, p. 19. 12-17)

Iam itaque verarum invenitur sermo quoniam prediximus scilicet quod rethorica composita est ex scientia resolutoria et ex politica et quod est in moribus et similatur in aliquo dialectice, id est arti differendi et aliquibus aliis sermoni
 60 sophistico. Averroes. Res que existunt in multis artibus quandoque sumuntur in una arte tamquam partes ipsius considerate secundum modum et dispositionem prout competunt illi arti et sue intentioni et relictis dispositionibus secundum quas diversificantur ab ejus intentione. Fiunt ergo res morales pars hujus artis prout apte sunt intentioni rhetoris in triplici genere cause. Et res quoque topice et sophisticæ ingrediuntur in hanc artem prout ex eis sumuntur quedam communia
 65 que faciliter se statim offerunt intellectui omnium vel plurium videlicet vulgarium quales rationes sillogistice propinque acceptionis, scilicet exempla et enthymemata, et res sophisticæ que his assimilantur. Et hoc per hoc ut conetur conator apparatus istius dialectice non secundum modum orationis, sed secundum modum alicujus scientiarum.

41 naturaliter om. T 42 operationum justitie PT: justitie operationum F || igitur om. F
 43 eos om. F 46 ad redargutiones et increpationes T: ad redargutiones et increpationes et
 redargutiones et increpationes P 52 hoc P: hec T 58 in aliquo dialectice P: mathematico
 dialectice T 59 multis artibus PF: artibus multis T 65 intellectui TF: intellectu P 66 et² om.
 T 67 ut PT: enim F

7. *Rhet.* I 4, 1359b 26-30 (Lyons, p. 20. 5-8)

70

Oportet preterea ut sciat omnes sumptiis civium et si fuerit in ea homo otiosis aut inutilis tollatur et si superflui sumptiis fuerit ibi quis reprimatur ab hoc statu. Averroes. Et si fuerit ibi quis magnarum expensarum non circa honesta aut necessaria, auferatur ab eo superfluum quod inutiliter consumit. Non enim propter divitiarum incrementum fiunt opulenti tantum sed etiam propter paritatem expensarum. 75

8. *Rhet.* I 5, 1361b 30-32 (Lyons, p. 27. 8-10)

Potentia enim longitudinis vite alia est, eo quod multorum hominum prolongatur vita. Averroes. A potentia sanitatis. Et sunt tamen expoliati viribus corporis.

9. *Rhet.* I 5, 1361b 30-32 (Lyons, p. 27. 8-10)

80

Potentia enim longitudinis vite alia est, eo quod multorum hominum prolongatur vita. Averroes. Et dubitatur qualiter stet vite longitudo cum egritudine frequenti. Et sunt tamen expoliati viribus corporis.

10. *Rhet.* I, 5, 1361b 39-1362a 1 (Lyons, p. 27. 18-20)

Salvam autem habente fortunam est quando fuerit fortuna homini causa boni. Averroes. Bona autem fortune consistentia est ut sit casus causa homini alicui proventus bonorum ipsi aut bonorum que habeat in se ipso aut que eveniant ab extrinseco. Causa vero ipsius casus interdum est ars et interdum natura, et hoc est plurimum. Verbi gratia casus a natura ut nascatur quis habens potentiam et dispositionem ut difficulter turbare possint ipsum ab extrinseco venientia ut in eo qui naturaliter habet firmam et constantem sanitatem. Casus autem ab arte ut quod sumat quis venenum et evadat per hoc ab aliqua periculosa egritudine. Et hoc est ut sit vir in hac aliqua dispositione vel sic et sit taliter habens omnia hec vel plura vel majora et sit causa horum ipsa fortuna. 85 90

11. *Rhet.* I 5, 1362a 13-20 (Lyons, p. 28. 9-15)

95

Oportet quidem ut determinemus quando converterimus sermonem ad laudem. Mandationes eius de hiis sunt in quibus oportet sciri veritatem. Ratiocinantur enim in rebus futuris et instantibus et similiter prohibitiones monstrant et notificant simile huic in contrariis. Averroes. Virtutis enim certa notitia proprie pertinet ad eum qui laudibus intendit et cum virtutum quidam sit quod pertinet futuro et quidam quod 100

73 circa PF : contra T || aut PF : et T 87 ipsi aut bonorum om. T || habeat PT : habet F 88-89 et hoc est plurimum verbi gratia casus a natura om. 89 plurimum P : ut plurimum F 91 firmam PT : fieri materia 93 hac aliqua P : aliqua hac T : hac F || taliter PT : naturaliter F 99 virtutis PF : virtutes T || enim PT : etiam F || proprie pertinet PF : pertinet proprie T 100 quidam¹⁻² PT : quedam F || quod om. T

praesenti, utitur quidem eis laudator seu demonstrator prout praesenti pertine<n>t; deliberator autem sive consultor prout pertinent futuro, id est ad utilitatem. Futura autem sunt ipsi fines propter quod fit deliberatio. Ex his patent ipsorum contraria propter que fiunt inhibitiones. Et quoniam deliberatoris propositum et quod est
 105 propositum in intentione sua et cogitatione sunt inductiva utilitatis deliberat quidem non de postremo sed de hiis que fiunt in postremo et ea sunt inductiva utilitatis apud actiones et inducens utilitatem reputatur bonum.

12. *Rhet.* I 6, 1362a 34–b 4 (Lyons, p. 29. 10–16)

Aliquando enim consequitur hoc ut salvent a malo et ista ut faciant adipisci
 110 bonum in postremo et ut acquiri faciant loco paucorum bonorum utilia multa et loco magni mali parvium eo quod illud dignius est aut potius. Majus est viliorum et hoc erit aut in illis et tunc est utile aut in istis et tunc est transmutatio. Averroes. Bona que ex bonis proveniunt nominavit Aristoteles utilia simpliciter. Ex malis autem provenientia nominavit transmutationes que sunt quandoque de majori
 115 malo ad minus, quandoque autem de malo ad bonum. Deinde quoniam quidem virtutes quoque bona sunt absque dubio tunc possessorum earum secundum hoc quidem de ipsis possident decens est status.

13. *Rhet.* I 6, 1362b 8–12 (Lyons, pp. 29. 21–30. 1)

Delectabilia ergo cum honesta fuerint sunt ex his que appetuntur propter se.
 120 Etiam declarabitur ex nostra determinatione qua ea definiabimus particulariter quoniam bona sunt procul dubio. Averroes. Et quoniam etiam proficiunt ad bonum interdum. Et bonitas status etiam ex hiis est eo quod ipse quoque qui propter se appetitur et in eo est magis et minus et equalitas.

14. *Rhet.* I 6, 1363a 11–19 (Lyons, p. 31. 13–19)

Amici autem et inimici et maligni consentiunt in bonum. Attamen cum
 125 infertur eis dampnum eximium et vehemens et si quidem doleant de dampno assentiunt tamen bono propterea quod ipsum est in propaculo et inimici etiam non possunt resistere et negare ipsum. Dixit translator. In hoc passu invenimus textum Aristotilis vel ita corruptum vel decurtatum vel forte in se obscurum
 130 quod sententiam plane intelligibilem ex eo elicere non potuimus. Unde visum fuit verbum ex verbo transferre et post ipsum ad ejus elucidationem textum Aviscenne ex libro suo Asschipe subungere usque ad finem capituli. Inquit Aristotilis. Istud est commentum et debebat esse in margine sed non potuit. Averroes. Et ex inceptivis beneficiis valde conferentibus et ex actibus quorum magnifica reputatur

101 pertinet PT: pertinent F 102 pertinent PF: pertinet T 103 quod P: quos TF || fit PT: sit F || deliberatio PF: deliberatio T 105 propositum P: precipium T 133 averroes P: aviscenne T || et² om. T 134 valde T: vadit PF || magnifica reputatur PF: magnificare putatur T

quantitas apud eos erga quos talia exercentur est ut eligat quis virum quempiam 135
magne potentie ex aliqua gente nota habentem inimicum similiter magne potentie
ex gente altera, et extollat virum illum et sibi pertinentes laudibus et beneficiis
quibus potuerit; inimicum vero et sibi pertinentes deprimit et mala que potuerit
exaggregat erga ipsum prout accidit Homero poete cum Grecis et inimicis eorum.
Grecos enim et magnates eorum et qui ex parte ipsorum erant magnificavit 140
laudibus, et extulit carminibus durabilibus in sempiternum. Alios vero scilicet
ipsorum adversarios submersit vituperiis que nulla umquam absterget oblivio in
facto proelii quod olim habitum est inter ipsos. Greci igitur Homerum quasi pro
viro deificato receperunt et pro summo doctore habuerunt. Et ut in summa dicatur
malum inferre inimicis et bonum conferre amicis de rebus valde utilibus reputatur. 145
 Deinde qui antecedit et eligit ex viris aut ex feminis quemadmodum elegit homerus
 orosium atheniensem et Elenam et Alexandrum et Achillem.

136 habentem P : habente TF 138 potuerit¹ PT : potuit F || deprimit PT : deprimet F 139
 exaggregat PT : exagerat F 144 dicatur FP : dicens T

ABSTRACT

Quoting/Translating. The Arabo-Latin Translation of Aristotle's Rhetoric by Hermann the German and the Quotations from al-Fārābī and Averroes

The Latin translation of the Arabic version of Aristotle's *Rhetoric* was made by Hermann the German between 1243 and 1256. It is extant in its entirety in two manuscripts preserved in Paris (P = *Parisinus Latinus* 16673, saec. XIII) and Toledo (T = *Toletanus* 47.15, saec. XIII). Two folios of the Florence manuscript (F = *Laurentianus Plut.* 90. Sup. 64, saec. XV) have preserved the passages of Averroes that Hermann utilized in his translation. This Latin translation was executed on the basis of an Arabic witness of the *Rhetoric* that belongs to the same tradition as the text of the *Rhetoric* that al-Fārābī, Avicenna and Averroes used in their commentaries.

After a brief discussion of Hermann the German and the goals he claims to follow in translating the Arabic version of Aristotle's *Rhetoric* into Latin, the aim of this contribution is to study the way he uses al-Fārābī's and Averroes' Commentaries, by answering the following questions: how can one identify and delineate al-Fārābī's and Averroes' quotations?, what is the nature of these quotations?, and what function do they perform in Hermann's Arabo-Latin translation?

This study will thus provide a general framework for examining Avicenna's quotations in Hermann's translation of the *Rhetoric*.

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**The *Liber primus naturalium*,
i.e. the *Physics* of the Avicenna latinus***

I. AN INCOMPLETE TRANSLATION IN TWO PHASES

The medieval Latin translation of Avicenna's *al-Samā' al-ṭabī'ī* of the *Šifā'* is of a very particular kind insofar as it has been realized in two different phases, separated from one another by almost a century. The first phase of the translation can with certainty be related to twelfth century Toledo, most likely the circle of Gundissalinus. However, one looks in vain for any dedication or any note that specifies the name(s) of the translator(s). Marie-Thérèse d'Alverny, on the basis *inter alia* of the vocabulary used, tentatively proposed to date this translation at the third quarter of the twelfth century, and Van Riet, with due prudence, has accepted this proposal¹. This first phase of the translation of Avicenna's *Physics* — in what follows I will simply designate it as the 'Toledo translation' — covers the first and second treatises (*maqāla*), as well as the very beginning of the third treatise, i.e. the first chapter ('Prologus' in the Latin translation) and part of chapter two (chapter one in the Latin)². It is quite perplexing that the Toledo translation stops unexpectedly, namely in the middle of an exposition, more precisely after having covered approximately one fourth of the second chapter³. As to the reason why it so suddenly stopped, one can only speculate.

* I wish to thank Amos Bertolacci for his critical remarks that helped to substantially improve both the style and the content of this paper.

¹ AVICENNA LATINUS, *Liber primus Naturalium. Tractatus primus. De causis et principiis naturalium*, ed. S. VAN RIET. Introduction doctrinale par G. VERBEKE, Peeters - Brill, Louvain-la-Neuve - Leiden 1992, p. 53*, where in a footnote reference is given to M.-T. D'ALVERNY, *Notes sur les traductions médiévales d'Avicenne*, « Archives d'Histoire doctrinale et littéraire du Moyen Âge », 19, 1952, pp. 337-358, p. 344.

² The translation of the first two treatises is already available in a critical edition, see AVICENNA LATINUS, *Liber primus Naturalium. Tractatus primus. De causis et principiis naturalium* cit., and AVICENNA LATINUS, *Liber primus Naturalium. Tractatus secundus. De motu et de consimilibus* ed. S. VAN RIET[†], J. JANSSENS, A. ALLARD. Introduction doctrinale par G. VERBEKE, Académie Royale de Belgique, Bruxelles 2006.

³ In the forthcoming edition of the Latin translation of the third treatise of the *Physics*, it covers 62 out of 227 lines, see AVICENNA LATINUS, *Liber primus Naturalium. Tractatus tertius. De his quae habent naturalia ex hoc quod habent quantitatem*, ed. J. JANSSENS, Académie Royale de Belgique, Bruxelles, 2017 (in print). Parts of this paper are inspired by the Introduction that I wrote to this edition.

One might think of the sudden death of the translator, or maybe of one of the two collaborators in the case in which a team was at work (as was unambiguously the case with regard to the translation of Avicenna's *De anima*), but in the actual state of affairs this is at best a reasonable hypothesis, no more⁴.

Almost one century later, the translation of the third treatise was continued at Burgos, starting from the very point where the Toledo translation had stopped. After chapter 9 (= 10 in the Arabic editions), it affirms: «Explicit Liber Sufficientiae Phisicorum Avicennae translatus a magistro Johanne Gunsalvi de Burgis et Salomone de arabico in latinum, ad preceptum Reverendissimi Patris ac Domini, Don Gunsalvi, episcopi Burgensis, quae est civitas in Hispania». According to this note the translation was ordered by bishop Don Gunsalvi, i.e., Ganzalo García Gudiel. Since this latter was bishop of Burgos from 1275 till 1280, the translation can be dated as belonging to that very period⁵. As to the identity of the two translators, of whom the names are given in the preface, nothing cannot be said with certainty, excepted for the fact the 'Salomon' was in all likelihood a Jew⁶.

But also the Burgos translation does not cover the complete *al-Samā' al-ṭabī'ī* of Avicenna's *Šifā'*. In fact, it omits to translate the last four chapters of the third treatise, as well as the complete fourth treatise. This latter is entitled in Arabic: «On the accidents of these natural things and their mutual relations, as well as the things that are attached to them»⁷. It is largely inspired by Aristotle's *Physics*,

⁴ J. JANSSENS, *The Physics of the Avicenna latinus and Its Significance for the Reception of Aristotle's Physics in the West*, in A. VAN OPPENRAAY ed. with the Collaboration of R. FONTAINE, *The Letter before the Spirit: The Importance of Text Editions for the Study of the Reception of Aristotle*, Brill, Leiden - Boston 2012 (ASL, 22), pp. 311-330, especially p. 312. Regarding the collaboration between two persons (i.e., Dominicus Archidiaconus and Avendeuth Israelita) in translating the *De anima*, as mentioned in a preface, which is present in the majority of manuscripts offering the text of Avicenna's *De anima*, see AVICENNA LATINUS, *Liber de Anima seu Sextus de Naturalibus* I-III, ed. S. VAN RIET. Introduction doctrinale par G. VERBEKE, Peeters - Brill, Louvain - Leiden 1972, pp. 98*-105*. Van Riet (*ibid.*, p. 101*) qualifies Avendeuth Israelita as a 'mysterious person'; however, scholars now more and more agree that Avendeuth refers to the Jewish philosopher Ibn Daud, see e.g., C. BURNETT, *Arabic into Latin: the reception of Arabic philosophy into Western Europe*, in P. ADAMSON, R. TAYLOR eds., *The Cambridge Companion to Arabic Philosophy*, Cambridge University Press, Cambridge 2005, pp. 370-404, p. 380.

⁵ See the seminal paper of M. ALONSO ALONSO, *Homenaje a Avicenna en su milenario: Las traducciones de Juan González de Burgos y Salomon*, «Al-Andalus», 14, 1949, pp. 291-319, esp. pp. 308-310; see also AVICENNA LATINUS, *Liber tertius Naturalium. De generatione et corruptione*, ed. S. VAN RIET. Introduction doctrinale par G. VERBEKE, Peeters - Brill, Louvain-la-Neuve - Leiden 1987, pp. 67*-68*.

⁶ ALONSO ALONSO, *Homenaje a Avicenna en su milenario cit.*, p. 310.

⁷ AVICENNA, *The Physics of The Healing*, Books I-II, III-IV, A parallel English-Arabic text translated, introduced, and annotated by J. MCGINNIS, Brigham Young University Press, Provo, Utah 2009 (Islamic Translation Series), p. 402 (English translation slightly modified).

but it contains now and then important developments or innovative ideas, as evidenced by Avicenna's conceptions of 'intermediary rest' and inclination (*mayl*), and by his attribution of a proper space (*ḥayyiz*) to each body⁸. As to the last four chapters of the third treatise, they deal with different topics: the eternity of motion and time, in spite of their being preceded by the essence of the 'Creator'; the existence, or not, of *minima naturalia*; and the discussion of the topic of 'directions'. The first of them, i.e., the eternity of motion and time, is an eminently Aristotelian idea. In the added reference to the precedence of the essence of the 'Creator', one cannot but detect an allusion to Aristotle's argument of the 'Unmoved Mover'. Concerning the affirmation of '*minima naturalia*', Avicenna, as he does for other physical realities, goes far beyond Aristotle, who only had offered a very basic, 'embryonic' theory with regard to them⁹. As to the topic of directions, it is not discussed by Aristotle in his *Physics*, but in his *On Heavens*, II, 2: in this case, Avicenna's exposition is largely indebted to Aristotle's¹⁰.

Surveying the totality of the omitted parts, one detects in them many doctrines and ideas that remain closely in line with Aristotle's point of view, but also several original, substantially innovative developments. However, such two-fold characterization applies, without discussion, to the totality of Avicenna's *Physics*. A good illustration thereof offers his discussion of motion in the second treatise. In that exposition, Avicenna takes over Aristotle's definition of motion — i.e. the perfection of what is in potentiality, as such — but he, perhaps under the influence of some of the Greek commentators, adds

⁸ Regarding the link between this treatise of Avicenna's work and Aristotle's *Physics*, see A. HASNAWI, *La Physique du Šifā': aperçus sur sa structure et son contenu*, in J. JANSSENS, D. DE SMET eds., *Avicenna and His Heritage*, Leuven University Press, Leuven 2002 (Ancient and Medieval Philosophy, Ser. I, vol. 28), pp. 67-80, pp. 68-69. As far as I now the notion of *ḥayyiz*, 'space', has not yet received any particular study, contrary to those of 'intermediary rest' and 'inclination', for which one can see respectively Y. T. LANGERMANN, *Quies media: A Lively Problem on the Agenda of Post-Avicennian Physics*, in N. BAYHAN ET AL. eds., *Uluslararası İbn Sînâ Sempozyumu. Bildiriler. International Ibn Sina Symposium. Papers II*, İstanbul Büyükşehir Belediyesi Kültür A. Ş. Yayınları, İstanbul 2009, pp. 53-67, and A. HASNAOUI, *La dynamique d'Ibn Sînâ (La notion d'inclination: mayl)*, in J. JOLIVET, R. RASHED (dir.), *Études sur Avicenne*, Les Belles Lettres, Paris 1984, pp. 103-123.

⁹ For the presence of the idea of '*minima naturalia*' in an embryonic state in Aristotle, see A. G. VAN MENSEN, *From Atomos to Atom*, Harper and Row, New York 1960, p. 44 (reference due to R. GLASNER, *Averroes' Physics. A Turning Point in Medieval Natural Philosophy*, Oxford University Press, Oxford - New York 2009, p. 144). J. MCGINNIS, *A Small Discovery: Avicenna's Theory of Minima Naturalia*, «Journal of the History of Philosophy», 53, 2015, pp. 1-24, clearly shows that Avicenna's doctrine is highly innovative compared to the expositions of his Greek predecessors on this issue.

¹⁰ HASNAWI, *La Physique du Šifā'* cit., p. 68.

the qualification 'primary' to the notion of 'perfection'¹¹. More significantly, and entirely new, is his acceptance — this time in sharp contrast with Aristotle and the whole tradition related to him — of the existence of 'motion' in the category of 'situs'¹². Since a clear desire to become better and fuller acquainted with Avicenna's physical view inspired the person (or persons?) who commanded to continue the Toledo translation, it is rather puzzling that the Arabic text has not been translated completely. Certainly, this time, there is no stop in the middle of a chapter, as was the case with the Toledo translation, but at the very end of a chapter, namely chapter nine (ten in Arabic) of the third treatise. In this chapter, Avicenna brings to an end what one could label his (systematic) exposition on the issue of finiteness/infinity, in other words a kind of 'corollary', i.e. a kind of systematic, and partly independent elaboration of Aristotle's exposition on this topic¹³. Did Moerbeke's new translation of Aristotle's *Physics* lead the translator(s) to consider Avicenna's work as no longer important, and hence as no longer worthy of translation? This looks highly improbable given that of Moerbeke's double revision of Jacques of Venice's old translation, the so-called

¹¹ See *Liber primus Naturalium. Tractatus secundus* cit., p. 151, lines 75-76. For the presence of this qualification in the commentators, see J. JANSSENS, *L'Avicenne latin: un témoin (indirect) des commentateurs (Alexandre d'Aphrodise-Thémistius-Jean Philopon)*, in R. BEYERS, J. BRAMS, D. SACRÉ, K. VERRYCKEN eds., *Tradition et traduction. Les textes philosophiques et scientifiques au moyen âge latin. Hommage à F. Bossier*, Leuven University Press, Leuven 1999 (Ancient and Medieval Philosophy, Ser. I, vol. 25), pp. 89-105, pp. 97-98 and A. HASNAWI, *La définition du mouvement dans la Physique du Šifā' d'Avicenne*, « Arabic Sciences and Philosophy », 11, 2001, pp. 219-255, especially pp. 224-226.

¹² *Ibid.*, pp. 197, lin. 91- 202, lin. 71.

¹³ Regarding Avicenna's rearrangement of Aristotle's *Physics* along thematic lines, which reminds one of the corollaries of such commentators as e.g., Philoponus and Simplicius, see J. JANSSENS, *Ibn Sînâ: An Important Historian of the Sciences*, in BAYHAN ed., *Ulusal Arası İbn Sînâ Sempozyum* cit., pp. 83-93, especially pp. 83-84. The proper discussion of finiteness/infinity covers actually the chapters 6-8 (7-9 of the Arabic editions), but this final chapter 9 in the Latin translation (=10 in the Arabic editions) remains somehow related to the finiteness/infinity thematic insofar as it discusses the possibility of finite/infinite potencies in bodies — including the affirmation that nothing finite can have an infinite force, see HASNAWI, *La Physique du Šifā'* cit., p. 68. This kind of approach to a specific problem related to Aristotle's *Physics*, but placed in a broader historical perspective and treated in a manner that is only loosely based on Aristotle's very wording, had in late Greek thought two major examples, i.e. Philoponus (see his *Corollaries on Place and Void* [with Simplicius, *Against Philoponus on the Eternity of the world*], translated by D. FURLEY [and C. WILDBERG], Duckworth, London 1991, pp. 13-94) and Simplicius (see his *Corollaries on Place and Time*, translated J. O. URMSON, Duckworth, London 1992). Although Avicenna's approach is not completely identical with theirs, there exist, nevertheless, many common elements, as e.g., the systematic treatment of a given topic and the detailed attention to all previous existing doctrines. It would be worthwhile to make a more in-depth comparison between Avicenna, on the one hand, and Philoponus and Simplicius, on the other, but this clearly exceeds the limits of the present paper.

‘translatio vetus’, only the first minor revision became widespread¹⁴. Moreover, as shown by Roger Bacon’s *Questiones alterae super libros Physicorum* and Albert the Great’s commentary on Aristotle’s *Physics* (both dated ca. 1250), in the middle of the thirteenth century there existed already a serious familiarity with Aristotle’s work. Hence, it is highly doubtful that Moerbeke’s translation had such a doctrinal significance as to abate suddenly the original interest in Avicenna’s work, an interest that unmistakably existed when the translation project in Burgos was started. Therefore, a more plausible explanation is perhaps that the stopping of the translation at that precise point — namely just before a chapter where the eternity of time, together with the qualification of (or, at least, allusion to) God as Unmoved Mover, is affirmed — is intimately related to the famous Parisian condemnation of 1277¹⁵.

II. INFLUENCE OF THE LATIN TRANSLATION OF AVICENNA’S *PHYSICS*

Whether the part translated at Burgos ever had influence on the Latin West cannot be totally excluded, but I looked so far in vain for any concrete trace of such influence¹⁶. However, it seems that there existed a real interest

¹⁴ J. BRAMS, *Les traductions de Guillaume de Moerbeke*, in J. HAMESSE ed., *Les traducteurs au travail. Leurs manuscrits et leurs méthodes*, Brepols, Turnhout 2001, pp. 231-256, pp. 236-237. It is perhaps worthwhile to note that, besides Jacques of Venice’s translation, another Graeco-Latin translation (the so-called ‘Vaticana’, dated also twelfth century) and two Arabic-Latin translations (one by Gerard of Cremona, dated before 1187, and another by [in all likelihood] M. Scot, dated ca. 1220-1235) existed before Moerbeke started his first revision of Jacques of Venice’s translation in 1260.

¹⁵ I have already evoked this hypothesis in an earlier publication, see J. JANSSENS, *The Reception of Avicenna’s Physics in the Latin Middle Ages*, in A. VROLIJK, J. HOGENDIJK eds., *O ye Gentlemen: Arabic Studies on Science and Literary Culture in Honour of Remke Kruk*, Brill, Leiden 2007 (IPTs, 74), pp. 55-64 (but correct ‘chapter 11’ into ‘chapter 9’ at p. 57, lin. 17). MCGINNIS, *A Small Discovery* cit., p. 15, states in a somewhat similar way, but without any explicit reference to the 1277 condemnation: « Interestingly, the Latin translators of Avicenna’s *Physics* stopped translating the *Physics* at III.10 — no doubt in part, if not in full, because Avicenna provides some of his most thorough and trenchant arguments for the eternity of the cosmos there, a topic that the Church Schoolmen would have wanted to avoid ». Let me add that I am well aware of the multiple problems that still surround the exact nature and influence of the 1277 condemnation, see H. THIJSEN, *Condemnation of 1277*, in E. N. ZALTA ed., *The Stanford Encyclopedia of Philosophy* (Winter 2013), <<http://plato.stanford.edu/archives/win2013/entries/condemnation/>>.

¹⁶ From the different ‘libri naturales’ of Avicenna (besides *Physics* 3) that were translated at Burgos, i.e., *De caelo et mundo*, *De generatione et corruptione*, *De actionibus et passionibus*, and *Liber meteororum*, a direct use has only been discovered with regard to the *De generatione et corruptione*, namely in Ugo Benzi’s commentary on the first book of Avicenna’s *Canon medicinae*, see S. VAN RIET, *Le De generatione et corruptione d’Avicenne dans la tradition latine*, in J. THIJSEN, H. BRAAKHUIS eds., *The Commentary Tradition on Aristotle’s ‘De generatione et corruptione’*. *Ancient, Medieval and Early Modern*, Brepols, Turnhout 1999 (*Studia Artistarum*, 7), pp. 69-77, p. 73. So far, I only discovered vague indications for a possible use of the Burgos translation of Avicenna’s *Physics* 3 in Duns Scotus and Peter Olivi, see JANSSENS, *The Reception of Avicenna’s Physics* cit., p. 63.

in Avicenna's physical works in the Italy of the fifteenth century, because the only manuscript in which this translation has been preserved, i.e. ms. Vat. Urb. Lat. 186, is of humanistic type, and, moreover, has been in possession of the Duke of Urbino, Federico da Montefeltro (1422-1482)¹⁷. In addition, since the library catalogue of the Sorbonne of 1338 mentions all the parts of the natural books of Avicenna which had been translated at Burgos, it looks possible that those parts attracted the attention of some of the Sorbonne teachers, and maybe even of thinkers (theologians, physicians, or members of the *artes*-faculty) in wider circles in France, at least during the fourteenth century. As to the part translated at Toledo, it indeed had an influence, although not as important as that of the *De anima* or of the *Metaphysics*. The first traces of a possible use are present in the thought of Richard Rufus of Cornwall and Robert Grosseteste, but the evidence is somewhat thin. For a clear, explicit use one has to wait until the middle of the thirteenth century, more precisely until the commentaries on the *Physics* by such authors as e.g., Adam of Bockfeld, Roger Bacon, Thomas Aquinas, and, above all, Albert the Great¹⁸. But even in these later authors Avicenna's most innovative ideas were seldom accepted. For example, the acceptance of motion in the category of 'situated' is systematically rejected by the Latin scholastics, whereas it became almost standard in the post-Avicennian tradition in the Islamic world¹⁹. Moreover, many Scholastics, as e.g., Albert the Great, combined elements taken from Avicenna's *Physics* with other ideas taken from Averroes' *Long Commentary on the Physics*, although these latter were not necessarily in agreement with Avicenna's view(s)²⁰.

III. TRANSLATION TECHNIQUES AND PARTICULARITIES

When one compares the manner of translating used in Toledo with that practiced in Burgos, one detects several common factors. The following list, although not exhaustive, enumerates a few of them: (1) (too) literal calques of the Arabic word order; (2) the use of 'ad sensum' translations and of clarifying translations or additions; (3) the presence of omissions, mainly by *homoioteleuton* (related to either the Arabic manuscript used, or misread, by the Latin translator,

¹⁷ See AVICENNA LATINUS. *Liber tertius Naturalium. De generatione et corruptione* cit., p. 66*.

¹⁸ For a more detailed survey, see JANSSENS, *The Reception of Avicenna's Physics* cit., pp. 57-62.

¹⁹ Regarding the reception of Avicenna's doctrine of motion in the Islamic world, see J. JANSSENS, *The Reception of Ibn Sīnā's Physics in Later Islamic Thought*, « *Ilahiyyat Studies* », 1 2010, pp. 15-36.

²⁰ A fine illustration thereof is present in A. HASNAWI, *Le statut catégoriel du mouvement chez Avicenne : context grec et postérité médiévale latine*, in R. MORELON, A. HASNAWI eds., *De Zénon d'Élée à Poincaré. Recueil d'études en hommage à Roshdi Rashed*, Peeters, Louvain - Paris 2004 (Les Cahiers du MIDEO, 1), pp. 607-622, especially pp. 611-614.

or to the transmission of the translation, or of uncertain origin — be it the Arabic model or the transmission of the Latin translation), but sometimes intentional (due to an obvious ‘redundancy’ in the Arabic text, typical of the pompous style of the Arabic language); (4) the use of typical medieval Latin words, or the specific medieval understanding of already existing words; (5) the rendering of a plural by a singular, and of an active by a passive — or vice-versa; (6) mistaken translations resulting from a confusion between two Arabic words of similar graphic, or even of identical graphic, especially insofar as one cannot exclude the possibility of the (at least, partial) absence of diacritical points in the manuscript that figured as model for the Latin translation; and (7) the translation of a single Arabic word by a composed expression. Given the specific importance of this last phenomenon, I will devote a more detailed discussion to it under a separate heading (see section IV, below).

Regarding these common translation techniques and particularities, I here offer a few concrete examples²¹:

(1) *Literal calques of the Arabic*

A typical element of the Latin translation of the *Physics* is the habit of making a calque of the Arabic sentence, even in cases where this does not comply with the standard requirements of the Latin language. This phenomenon is attested on several occasions, see e.g.: (a) Tr. II, cap. III, p. 194, lin. 33-35: «(et hoc quod dixerunt), quod duritiei et mollitiei non est unum subiectum et potentiae et impotentiae, (destruitur ...)», which literally mirrors the syntax of the Arabic sentence *inna al-mawdū‘ laysa wāḥidan li-l-ṣalāba wa-l-līn aw al-quwwa wa-l-ḍu‘*²² — normally one would have expected the Latin to repeat ‘et non est unum subiectum’ before ‘potentiae et impotentiae’ or move ‘non est unum subiectum’ before ‘durietei et mollitiei’; (b) Tr. III, cap. III, p. 418, lin. 7-8: «Dicamus igitur opinionem (dicentis corpus in se habere partes in effectum infinitas) iam patet sua dissolutio», corresponding to the Arabic *ammā madḥab al-qā’il (...) fa-yazharu buṭlānuhū* — in Latin one would expect: «dicamus igitur quod dissolutio opinionis ... iam patet». In spite of the use of syntactical calques from the Arabic, the Latin translator, however, does not hesitate at other occasions to fully take into

²¹ In what follows, I will only provide instances taken from Tractatus II with regard to the Toledo translation and Tractatus III with respect to the Burgos translation. In the former case the pagination and line number(s) refer to the critical edition, i.e. AVICENNA LATINUS, *Liber primus Naturalium. Tractatus secundus* cit.; in the second to the forthcoming edition, i.e. AVICENNA LATINUS, *Liber primus Naturalium. Tractatus tertius* cit.

²² The conjunction ‘et’, instead of ‘nec’, in the sentence ‘et potentiae ...’ in the Latin translation of this passage results probably from the frequent confusion between *aw* and *wa-* in Arabic.

account the specificities of the Latin language compared to those of the Arabic. In this respect, I may mention: Tr. II, cap. IX, p. 290, lin. 8-9, where the Latin translator adds the words 'ideo debeat' inside the following affirmation: «Nec quia accidens indiget subiecto ex hoc quod est accidens, ideo debeat subiectum eius esse accidens», even if they have no direct counterpart in the Arabic text.

(2) *Translations ad sensum, and clarifying translations or additions*

Some translations can be qualified as suited to the context, in spite of their being not strictly literal, e.g. (a) Tr. II, cap. I, p. 173, lin. 33-35: «Motum autem pendere ab eo in quo est secundum quod est in aliquot praedicamentorum, non concedimus esse subiectum eius», in the context of an affirmation where Avicenna states that the motion's dependence upon one of the categories in which there is motion, does not refer to the motion's subject — Arabic: *wa-ammā ta'alluq al-ḥaraka bi-mā fihi l-ḥaraka min al-maqūlāt fa-laysa ya'nī bihī al-mawdū' lahā*; and (b) Tr. III, cap. III, p. 432, lin. 178-179: «et hoc totum est certum quia intellectus videt quod est possibile» for «*wa-ḡāmī'u dālīka ṣaḥīḥu ḡawāzi l-wuḡūdi fī l-'uqūl* (but the Latin translator read in his model probably *fī l-'aql*)», «and the possibility of the existence of all that is truly present in the intellects», or, less literally, with McGinnis: «all of which can, in fact, exist in the intellect (reading *fī l-'aql* instead of *fī l-'uqūl*)»²³.

On several occasions the Latin translation makes explicit what is vaguely referred to in the Arabic text, e.g. (a) Tr. II, cap. I, p. 162, lin. 49: the vague Arabic term *ṣay'* has been replaced, in full accordance with the context, by the more precise 'motu'; and Tr. III, cap. IV, p. 449, lin. 45-46: what the Arabic text affirms in a very general way, namely «if it is not the case» (*iḏā lam yakun*) is rendered in the Latin in a much more precise way, i.e. «cum <non> habuerit signationem»; (b) Tr. II, cap. XII, p. 346, lin. 77: the affixed pronoun *-hu* of the expression *fīhi* is correctly made explicit in the Latin translation 'in cursu' as signifying 'cursus' (even if one would expect in the Arabic text a reading *fīhā* instead of *fīhi*²⁴); and Tr. III, cap. III, p. 438, lin. 240: 'ipsum movere' offers a correct and precise translation for the affixed pronoun *-hā*.

Finally, now and then the Latin translation has an additional word or expression that does not directly correspond with any word in the Arabic text, but contributes to a better understanding of a given sentence in its broader context, as a clarifying addition, e.g. Tr. II, cap. X, p. 312, lin. 28: in the framework of the statement: «(Ergo secundum eos aliquando tempus est...), aliquando

²³ AVICENNA, *The Physics of The Healing*, Books III-IV cit., p. 293.

²⁴ See J. MCGINNIS, *Ibn Sīnā on the Now*, «American Catholic Philosophical Quarterly», 73, 1999, pp. 73-106, p. 81, note 22.

est sine motu (et tunc vocabitur Arabice adahr)», the Latin translation, in translating *muğarradan*, «separate», by ‘sine motu’, makes clear which precise kind of separation is implied, i.e. separation from motion; and Tr. III, cap. I, p. 388, lin. 76: the Latin translators have added the specification ‘a tactu’ to the notion ‘vacuum’ inside the expression ‘vacuum ... in una parte’ (which, as such, is a literal translation of the Arabic expression *faraġa min ġihatin*).

(3) Omissions

Many of the attested cases of omission belong clearly to the genre of ‘omission by *homoioleuton*’. Sometimes, one can impute these omissions with relative certainty to one of the two traditions — the Arabic or the Latin. Illustrative of such cases are e.g., Tr. II, cap. III, p. 188, lin. 36-37, where the omission of the sentence «esset ei mobile quod habuerit esse» in all likelihood is related to an accident of the transmission of the Latin translation, because the Arabic text, having namely *mawġūda ... mawġūd*, does not offer a proper omission by *homoioleuton* (and, moreover, without the initial presence of the omitted sentence in the Latin translation, one can hardly explain the preservation of the qualification ‘illud’, Ar. *dālīka*, with respect to ‘mobile’ in the phrase «illud mobile» that follows immediately afterwards)²⁵; and Tr. III, cap. IV, p. 456, lin. 141: in view of the Arabic text, where one reads: *wa-l-nuqaṭ mutaġāwira*, one would have expected in the Latin translation the addition of «et puncta convicinantur» after the previous «convicinantur». The omission is clearly a case of omission by *homoioleuton* — in principle it can be linked with both the Arabic and the Latin tradition, but, given its attestation in the Arabic tradition, it becomes highly probable that the omission was present in the Arabic manuscript that the Latin translators had at their disposal²⁶.

However, it is sometimes impossible to identify the exact origin of an omission of this kind, namely whether it lies in the transmission of the Arabic text, in an erroneous reading of the translator(s) himself (themselves), or in the transmission of the Latin translation. See e.g. Tr. II, cap. VII, p. 236, lin. 43: the sentence «(extrema) et quicquid est hoc spatium quod est inter duo extrema» (corresponding to Arabic: [*al-ṭarafayn*] *fa-kull mā huwa hādā l-bu’d alladī bayna l-ṭarafayn*) lacks in the Latin translation — the omission is clearly by *homoioleuton*, but its origin can be situated either in the Arabic tradition (*al-ṭarafayn ... al-ṭarafayn*) or in the transmission of the Latin translation («extrema»

²⁵ The explanation that I gave in the edition, see AVICENNA LATINUS, *Liber primus Naturalium. Tractatus secundus* cit., p. 188 note 36-37, has to be corrected in the sense expressed here.

²⁶ See IBN SİNĀ, *Al-Sifā’, Al-Ṭabī’iyyāt, Al-Samā’ al-ṭabī’ī*, ed. S. ZĀYID, Al-Hay’a al-Miṣriyya l-‘āmma li-l-kitāb, Cairo 1983, p. 202, note 2, where it is indicated that this omission is present in manuscript ‘b’ (= al-Azhar, Ḥikma 24, ḥuṣūṣiyya 331).

... «extrema»); and Tr. III, cap. V, p. 463, lin. 55-57: in the presentation of the doctrine of some authors, who seem to have thought that only in estimation an infinite division of motion can be imagined, one finds in the Latin the following sentence: «Sed si via habuerit terminum ..., motus habebit terminum in actu minorem motibus», in which, after «via», *masāfa*, nothing corresponds to the Arabic words *min haytu hiya masāfa*, printed, without any variant, in all editions, so that one would expect the explicit presence of «inquantum via» in the Latin translation. However, nothing permits to decide whether the omission is related to the transmission of the Arabic text (*masāfa* ... *masāfa*) or of the Latin translation («via» ... «via»), or, rather than being related to the transmission of either of them, it may result from a faulty reading by the translators themselves, who would have confused the second *masāfa* with the first, being thus guilty of the same mistake that many copyists had already made before them.

It is worthwhile to note that a few omissions seem to be due to a conscious choice by the Latin translator, who in all likelihood found the concerned sentence in the Arabic text redundant. See e.g. Tr. II, cap. XII, p. 336, lin. 53-54: after the statement: «esse autem instantis in hoc loco, hoc est ut sit extremitas temporis in quo toto ipsum non est», the Latin translation, when compared to the original Arabic text, omits the following (indeed, rather redundant) Arabic sentence *ka-annaka qilta innahū fi ʿarāfi l-zamāni alladī huwa ma ʿdūm fihi mawǧūd*, whose tentative Latin translation would be «sicut dixeris quod sit existens in extremitate corporis in qua ipsum est non existens»; and Tr. III, cap. V, p. 470, lin. 139: after «non dicent quod si [i.e., the point] esset distinctum quod moveretur per se ipsum», one finds no translation of what immediately follows in the Arabic text, i.e. *wa-lā maṭalan makān bi-dātihī*, «et quod haberet verbi gratia locum per se ipsum»; although at first sight this might look a case of omission by *homoiooteleuton* (of uncertain origin), the omitted part conveys nothing essential to Avicenna's argument, and therefore it seems possible, or even likely, that the translators have consciously omitted this short passage.

(4) Medieval Latin

On several occasions, one finds Latin words that, especially in view of the Arabic text, must certainly, or almost certainly, be understood in a sense that is totally absent from classical Latin, but is clearly accepted in medieval Latin sources. See e.g. Tr. II, cap. II, p. 185, lin. 66-67 ('*praeposui*mus'): the verb '*praepondere*' is used in the sense of 'to mention beforehand', and Tr. III, cap. II, p. 417, lin. 151 ('*praefatorum*'): '*praefatus*' meaning 'above-said'²⁷.

²⁷ See *Mediae Latinitatis Lexicon Minus*, ed. J. F. NIERMEYER, Brill, Leiden - New York - Köln 1993, p. 835, respectively p. 830.

Now and then, one has to do with forms that are typical of, and sometimes even only exist in, medieval Latin sources, as e.g., Tr. II, cap. VI, p. 222, lin. 10-11: 'lagenam'²⁸, and III, cap. II, p. 414, lin. 125: 'scindibilia'²⁹.

(5) *Singular-Plural, Active-Passive*

Sometimes, the Latin translator(s) renders (render) a singular word by a plural, e.g., Tr. II, cap. I, p. 159, lin. 7: 'diversis' for *muḥtalif*, and Tr. III, cap. I, p. 398, lin. 170: 'partes' for *ğuz* — or inversely, see e.g. Tr. II, cap. XII, p. 348, lin. 7: 'terminum' for *ḥudūd*, and Tr. III, cap. III, p. 438, lin. 237: 'mille' for *ulūf*.

Of a somewhat similar nature is the replacement of an active wording by a passive — see e.g. Tr. II, cap. IX, p. 298, lin. 29-30: 'et dilatatur earum corpulentia' for *fa-yanfasihu al-ḥağm*, where, however, a semantically passive seventh form of an Arabic verb is involved, and Tr. III, cap. VIII, p. 502, lin. 53: 'corrumpitur' for *abtala* — or inversely, the passive singular third person of the perfect of the verb is translated by the active plural third person, see e.g. Tr. II, cap. I, p. 152, lin. 88 'dixerunt' for *qīla*, and Tr. III, cap. III, p. 430, lin. 155: 'aestimaverunt' for *fa-ḡunna*.

(6) *Faulty readings related to Graphical Similarity between Arabic Words*

Finally, in both phases of the translation, one finds instances where the actual Latin translation results form an obvious confusion between two Arabic words that are graphically close to each other, or sometimes simply identical (especially, in absence of diacritical points as was sometimes the case in ancient manuscripts). Classical examples are the confusion between *wa-* and *fā-*, *bi-* and *li-*, *araḍ* and *fard*, etc. I may here add a few other examples, which seem to be proper to the translation of our text: Tr. II, cap. IX, p. 277, lin. 10: *ḥāwī* ('vacua') and *hāwī* ('encompassing'): Tr. II, cap. XI, p. 322, lin. 28: *ḥayyiz* ('locum') and *ğuz* ('part'); Tr. III, cap. II, p. 409, lin. 70: *ayyil* ('cervus') and *Aḥīl* ('Achilles'); Tr. III, cap. VII, p. 492, lin. 126: *muṭlaqan* (rendered into Latin as an adjective, i.e. 'absolutus') and *maṭlūban* ('searched').

However, compared to the Toledo translators, the Burgos translators are less strict in fixing a single translation for technical terms. For example, the Arabic term *mudāḥala* is translated inside one and the same paragraph by '*penetratio*' (cap. I, p. 392, lin. 112), but also by '*infusio*' (cap. I, p. 392, lin. 118). This terminological variety risks to create ambiguity, all the more since somewhat before in the same chapter at line 33, which still belongs to the Toledo phase of translation, the same term is translated as '*permisceri*'. Another telling example

²⁸ *Ibid.*, p. 579.

²⁹ See *Dictionary of Medieval Latin from British Sources*, edd. R. E. LATHAM, D. R. HOWLETT, R. K. ASHDOWNE, Oxford University, London 1975 sqq., fasc. XV, p. 2968.

is present in chapter IX, where in less than ten lines, namely p. 522, lin. 159–167, *munāsaba* is translated by three different terms, i.e., ‘*comparatio*’, ‘*respectus*’ and ‘*dependentia*’. Finally, most illustrative of this fluctuation in terminological choices is the translation of the Arabic term *kamm*, which often — in the usual way — is rendered as ‘*quantitas*’, but sometimes, rather surprisingly, as ‘*mensura*’ (which normally translates the Arabic word *miqdār*). But, all in all, the similarities between both translations are greater than the dissimilarities.

IV. DOUBLE TRANSLATIONS

A most significant common element between the translations of both phases is undoubtedly the translation of one single Arabic word by two more or less synonymous Latin words, the so-called phenomenon of double translation. I have extensively dealt with this phenomenon in an earlier paper as far as the Toledo translation of the first two treatises is concerned³⁰. I there paid special attention to the manuscript Dubrovnik, Bibl. Dom. 20 (36-V-5), since it displayed many more double translations than any other manuscript. I documented that it testifies of double translations in several, different ways, i.e., by addition — either *supra lineam* or *in margine* — or by juxtaposition — either simple juxtaposition or a juxtaposition implying the use of a conjunction — of (more or less synonymous) terms; by rendering a single Arabic term by two different, not synonymous words, each of which however constitutes a possible translation; or by putting into parallel a literal and a less literal translation. I argued that the less literal rendering reveals a will to better ‘latinize’ the translation, or to make a given affirmation more understandable in its context. With regard to the transmission of the Latin translation, Van Riet already offered serious evidence for the existence of two families of manuscripts³¹. I therefore analyzed and discussed cases of double translation present in other manuscripts than the Dubrovnik, but which belong to the same family (according to Van Riet’s labeling, the ‘A-family’), and concluded, although with due prudence, that they in all likelihood were already present in the exemplar of the translator himself. Finally, I tried to show that the translations attested in the manuscripts of the family other than the one to which the Dubrovnik manuscript belongs (Van Riet’s ‘B-family’), and which can be qualified as alternative or double translation when compared to the A-family, do not necessarily result of a later revision of the Latin

³⁰ J. JANSSENS, *L’Avicenne latin: particularités d’une traduction*, in JANSSENS, DE SMET eds., *Ibn Sīnā and his Heritage* cit., pp. 113–129 (reprinted in J. JANSSENS, *Ibn Sīnā and his Influence on the Arabic and Latin World*, Ashgate, Aldershot, Hampshire 2006 [Variorum Collected Studies Series CS 843], XIV).

³¹ AVICENNA LATINUS, *Liber primus Naturalium. Tractatus primus* cit., pp. 54*–62*.

translation, as Van Riet had claimed. These alternative or double translations in the B-family turn out to be always more literal than the translations given in the A-family, and it is therefore likely that they represent the very first attempt of translation, since shifting from a very literal to a free translation is, in my view, the most natural way of making a translation (unless one starts with a rough draft, but this is never the case as far as the Avicenna latinus is concerned). Hence, if any revision took place, it was most probably in the ancestor of the A-family, namely with the aim of a better 'latinization'. Hence, I did not and I still do not see any serious reason to exclude that the common ancestor of all the surviving Latin manuscripts — the existence of which Van Riet also accepts — contained already these double translations (perhaps, in the margin or above the line).

This phenomenon of double translations is, as said, also present in the Burgos translation. Most of the times, one has the juxtaposition of two more or less synonymous terms, related to each other through a conjunction:

(1) *et*: cap. I, p. 391, lin. 101 «evidens et manifestum»: bayyin; cap. III, p. 426, lin. 101-102 «sequetur et eveniet»: yağib;

(2) *idest et*: cap. IX, p. 510, lin. 2 «recipiunt actionem idest et patiuntur»: al-ta'attur (the Arabic substantive is here translated by a verb);

(3) *atque*: cap. II, p. 415, lin. 138 «summatim atque omnino»: bi-l-ğumlati;

(4) (*non ...*) *nec* (or *neque*): cap. II, p. 414, lin. 122 «non impeditur nec defenditur»: lā yağib; cap. II, pp. 415, lin. 131-132 «non sit divisum neque scissum»: lam yanfaşil; cap. IV, p. 446, lin. 11 «non esset opus nec oporteret»: la-kāna lā yahtāğ;

(5) *vel*: cap. II, p. 405, lin. 28 «obviatio vel oppositio»: muhādāh; cap. VII, p. 498, lin. 212 «rimulam vel disruptionem»: taḥalḥul; cap. IX, p. 527, lin. 228 «impellens vel amovens»: dāfi'an;

(6) *aut (...)* *vel*: cap. II, p. 405, lin. 20-21 «aut per privationem causae secantis vel per absentiam divisoris»: bi-sababi 'adami mā yuqsamu bihī;

(7) *seu*: cap. I, p. 390, lin. 90 «vacua seu non tacta»: fāriğ; cap. II, pp. 407, lin. 49 «partem seu atomum»: ğuz' ;

(8) *sive*: cap. I, p. 401, lin. 211 «descriptio sive intentio»: ma'nā; cap. III, p. 428, lin. 116 «dentatus sive intercisus»: muḍarras.

One finds also occurrences of double translations where two more or less synonymous terms/expressions are juxtaposed without any conjunction: e.g., cap. II, p. 404, lin. 18 «verum etiam»: bal; cap. II, p. 414, lin. 119 «convenerunt concordaverunt»: ağma'a; cap. V, p. 466, lin. 85 «quia propter quod»: wa-dālika li-anna; cap. V, p. 474, lin. 179 «accidens quod advenit»: al-'āriḍ; cap. VII, p. 492, lin. 123 «forsan possibile est»: 'asā an. In two cases of adverbs, the two terms are somewhat separated in the text: cap. VII, p. 487, lin. 58-59 «adhuc (...)

postmodum»: *ba'du*; cap. VII, p. 496, lin. 189 «similiter (...) idem»: *ka-dālika*. In a similar way, the dual form of the Arabic word *dīl'ayn* (cap. III, p. 427, lin. 105) is rendered by the two separated terms «duarum (...) ambarum».

Sometimes one has the impression that the two terms used are expressing a hesitation between two alternate, not fully synonymous translations: cap. I, p. 391, lin. 102 «ad solvendum et contradicendum»: *li-l-munāqaḍa* (the translator seems to have been hesitant between what in his view is the basic meaning of the Arabic root *n-q-ḍ* and the meaning of the actual Arabic term); cap. I, p. 395, lin. 143-144 «per infusionem et per foundationem»: *bi-nḡirāz* (here one could imagine that in the original translation the second of the two terms was 'indundationem', but the context does not totally exclude the reading 'foundationem'); cap. I, p. 401, lin. 208 «divisibiles in infinitum vel in semper divisibiles»: *taqbalu l-qismata dā'iman* (the first alternative is more 'ad sensum', the second 'ad litteram'); cap. II, p. 407, lin. 48 «non ipsi alii»: *al-āḡarīn* ('non ipsi' is a clearly alternative translation for the more common 'alii'); cap. IV, pp. 453-454, lin. 118-119 «in actu realiter»: *fī l-wuḡūd* ('realiter' looks as a kind of (alternative?) interpretative translation, since the same expression is translated somewhat later by only 'in actu'); cap. V, p. 464, lin. 67 «iuste sit verum»: *ṣaḡḡa* (one wonders whether one of the two terms, i.e., 'iuste' or 'verum', was originally not placed *supra lineam* above the other); cap. V, p. 464, lin. 68-69 «unus (...) distinctus»: *muḡrad* ('unus' looks as a kind of (alternative?) interpretative translation, but note that one finds in the same context only 'unus' translating *muḡrad*); cap. VIII, p. 506, lin. 92 «accidit sive convenit»: *ya'riḍu* (elsewhere in the chapter translated by the verb *competit/competat*, which is more or less synonymous with 'convenit').

A possible indication of what originally presented itself as a double translation can maybe found in chapter III, p. 421, lin. 33-35, where it is stated: «Et fortassis quod pertransiremus hoc aut minime pertransiremus cum dependeat in alia natura alterius studii». The presence of 'alterius' could result from a double translation of the Arabic *bi-naw' āḡar min al-naẓar*: first, a very literal, «alia natura studii», then a more latinized: «natura alterius studii». Another indication for a possible double translation is present in chapter IV, p. 455, lin. 119-120, when Avicenna affirms: «et forsān quod non posset rotari supra ipsam [et est impossibile]». The final addition of 'et est impossibile' is somewhat problematic and therefore I have deleted it. However, it seems reasonable to suppose that in an earlier stage of the transmission of the translation, and, perhaps, already in the exemplar of the translator, one found the double translation 'non posset et esset impossibile' for the Arabic verb *istaḡāla*. A final, albeit less evident, case can be found in chapter IX, p. 520, lin. 135, where it is said: «quia hoc corpus sine dubio [non] est partibile et dividitur cum eo potentia». The negation 'non' is in contradiction with the original Arabic text. Therefore, I have simply deleted it

in the edition. However, by way of prudent hypothesis — in the actual state of affairs, the qualification ‘probable’ would clearly be too strong for the present case — one might imagine that this negation ‘non’ was followed in the original exemplar of the translators (or in an early copy of the original translation) by ‘est dubium’, thus constituting with ‘sine dubio’ a double translation of the Arabic expression *lā maḥāla*³².

Certainly, none of these cases permits to affirm with certainty that those double translations have been formulated by the translators themselves, rather than added later by one (or several) copyist(s). But, on the other hand, nothing excludes formally that they have been formulated by them.

V. A SPECIAL CASE: A DOUBLE COPY OF A PASSAGE

Special attention deserves a long passage of chapter IX that has been copied twice by the same hand³³. Somewhat surprisingly, one now and then finds minor variants, approximately forty in number, in the two versions. A large part of them can be explained by lack of attention: cases of mistaken readings, as e.g., ‘(corporis non) finitis’ instead of ‘(corporis non) finiti’ (p. 516, lin. 84), ‘(extra) haec (corpus)’ instead of ‘(extra) hoc (corpus)’ (p. 517, lin. 90), ‘(res ... non) dicunt (tarde esse)’ instead of ‘(res ...non) dicuntur (tarde esse)’ (p. 518, lin. 104), etc.; one case of repetition (‘iteravit’) and five cases of very limited omissions, namely the omission of one word, or at most of two words. However, this does not mean that the copyist was simply careless. He clearly tried to offer a copy as correct as possible, as becomes evident by the five cases of effaced additions (two of which belongs to copy A, three to copy B), as well as by the single case of marginal correction. Generally speaking, no systematic preference can be given to the readings of one of the two redactions. Indeed, a decision about which of the divergent readings has to be preferred had to be taken on the basis of the context and, of course, of the comparison with the original Arabic text. This analysis showed up that the undoubtedly correct reading was attested sometimes in the first version, some other times in the second. In the two cases of inversion, i.e., *aeque bene erit/erit aequae bene*; *numerus privatus/privatus*

³² The Arabic expression *lā maḥāla* is translated by both ‘sine dubio’ and ‘non est dubium’ (although never together) in other books of Avicenna’s *Physics* translated at Burgos, see for example, AVICENNA LATINUS, *Liber tertius Naturalium. De generatione et corruptione* cit., p. 177, N°. 165 and AVICENNA LATINUS, *Liber quartus Naturalium. De actionibus et passionibus*, ed. S. VAN RIET. Introduction doctrinale par G. VERBEKE, Peeters - Brill, Louvain-la-Neuve - Leiden 1989, p. 114, N°. 155.

³³ In what follows, I will designate them as copy A and copy B. In manuscript Vat. Urb. Lat., they cover ff. 79r9-80v10, respectively 80v10-82r25.

numerus, content and original Arabic text do not permit to exclude any of the two readings. These inversions might result from the translator's will to latinize the wording, or simply be due to the fact that he forgot to write a word, and judged that it could be added without being obliged to efface the already written word. Thus, all factors can be entirely related to the very activity of copying.

But there are three cases the explanation of which seems not so easily reducible to that very activity:

(1) The first concerns the addition in copy B, and in it alone, of the word 'orbium' to 'circulationes (festinae)' in the framework of the following affirmation: «Sed potest esse quod erunt in futuro res infinitae, sed quaedam minus quam aliae, sicut motus infiniti quidam sunt magis festinantes et quidam sunt motus infiniti tardiores, quia circulationes festinae sunt plures sine dubio quam circulationes lentae; et, eodem modo, decennarii infiniti sunt minus quam uni infiniti et plus quam centenarii et millenarii infiniti» (cap. IX, pp. 523, lin. 180-184). Having shown that in a finite body no infinite power can exist, Avicenna remarks that the number of non-existent future events is not necessarily finite. Indeed, as stressed in the above quoted passage, the number of infinite fast rotations is undoubtedly greater than that of infinite slow rotations. Now, as in the translation transmitted by copy A, the Arabic text does not explicitly specify the concerned rotations as proper of the celestial spheres ('orbium'), contrary to what copy B does. Given that 'infinite motions' are in fact limited to the supra-lunar world, it is quite natural to specify the mentioned rotations as rotations of the celestial spheres. But is the addition of this specification due to an initiative of our copyist himself? If this were the case, one would expect its presence in both copies. Since this is not the case, one might suspect that it has been added — either in the text itself (*supra lineam*?) or in the margin — earlier in Latin translation, maybe by the translator himself or by a previous copyist, but that after reflection, it was effaced. If this is the correct hypothesis, one can imagine that our copyist has taken into account the effacement when copying the first time the passage, but has overlooked it when he copied it a second time. Alternatively, it is also possible that the word 'orbium' was written in the margin — either in the exemplar of the translators or in a later copy — and never effaced afterwards, as a kind of indication that this affirmation was about the celestial spheres (taking into account that also in this lower, earthly world faster circulations are more numerous than slower circulations in a same stretch of time). If this is right, then our copyist would the first time have fully realized that this marginal addition was of a specifying nature, hence not present in the Arabic text, but, when copying a second time the translation, he would have thought that it was essential to the text. All in all, this explanation remains highly speculative and therefore is of little use in clarifying the relationship between our copy and the original translation.

(2) Of much greater significance are the two occurrences of the alternative 'igitur/ergo': in its first occurrence, one reads (cap. IX, p. 518, lin. 106) 'igitur' in copy A («[ponamus] igitur») and 'ergo' in copy B («[ponamus] ergo»), whereas the inverse is the case at the second occurrence («[iam] ergo» / «[iam] igitur», p. 524, lin. 195). It looks most unlikely that the copyist would have deliberately replaced the first time 'igitur' by the synonymous 'ergo', and later would have done the inverse. In my view, one cannot but see in this inverted use a serious indication for the presence of both terms in the manuscript that was at the disposal of our copyist, and this in both occurrences. Of course, it is impossible to know whether 'igitur' and 'ergo' were written one after the other, or one above the other, or even one in the text and the other in the margin. Similarly, if this was indeed the case, one cannot determine whether the alternative, as such, was already present in the exemplar of the translators, or has been introduced by a later copyist.

(3) A most interesting case is related to the presence of a double translation, namely 'patientis vel passi' for Arabic *al-munfa'il*, which is attested only in copy B. It is twice included in a passage, where Avicenna states: «Cum ergo duplicaverimus aliquam partem *patientis vel passi* et aliquam partem agentis, quousque consumatur patiens finitum et posuerimus in sua oppositione corporis non finiti aliquas partes finitas, erit ergo relatio unius partis domini potentiae ad potentias omnium partium finiti sicut relatio partis *passi vel patientis* [primi] ad totum patiens, et hoc tamquam potentia partis corporis positi infiniti ad potentiam infiniti» (my italics) (cap. IX, pp. 516-517, lin. 82-87). It immediately strikes that in the second mention of the double translation the word order has been inverted: 'passi vel patientis' instead of 'patientis vel passi'. Moreover, it has to be noted that inside the very same passage one also finds, and this also on two occasions, the single translation 'patiens' for *al-munfa'il*. Now, when one looks at the other copy, i.e. copy A, one finds 'patientis' instead of 'patientis vel passi' and 'passi' instead of 'passi vel patientis': in other words, one finds in A each time the very first term of the double translation as given in B. Hence, it looks probable that this term figured in the actual translation, whereas the other term was most likely added *supra lineam* or in the margin. The presence in copy A of the single translation 'patiens' at the two other instances where the Arabic text has *al-munfa'il*, and this in full accordance with copy B, makes clear that in both of these cases no alternative translation was offered in our copyist's model. Insofar as 'patiens' constituted the standard translation for *munfa'il* in the translations of the Avicenna latinus, regardless whether those translations had been elaborated at Toledo in the twelfth century or at Burgos in the thirteenth century, the absence of such alternative in copies A and B is

simply normal³⁴. On the contrary, what is really surprising is the use of a double translation on the two other occasions in the copy B, and, above all, the single use of 'passi' on one occasion in copy A. In fact, in the former case the present and the perfect participle of the deponent verb 'patior' ('patiens', 'passus') are combined in an attempt to translate the seventh form of the Arabic verb *infa'ala*, which has in itself a passive meaning, namely 'to be or become influenced or affected by'. In this sense 'passus', 'what (or who) is affected by', in so far as it is morphologically passive, appears to be the more literal translation. But it is also obvious that from a semantical point of view the translation 'patiens' is preferable above 'passus'. Unless I am mistaken, the latter's use as a substantified adjective, as is the case here, is very unusual. Such substantified use becomes even more evident in the case of its isolated appearance in copy A. It looks therefore unlikely that a later copyist would have added this unusual alternative translation. Therefore, I am inclined to think that the alternative double translation was already present in the exemplar of the translators, who had perhaps a (small?) hesitation about the accuracy of the present participle 'patiens' for translating the Arabic participle *munfa'il*. It remains however unclear why they have inverted the word order the second time — as indicated above, the mentioning of only the first term in each of the two cases in copy A strongly confirms an actual inversion in the formulation. As such, this gives the impression that they had a slight preference for 'passus' as the most adequate translation, but the presence of the sole term 'patiens' on two occasions in the same context is rather indicative of the inverse. Since nothing permits to explain in a precise, non-speculative way this inversion in formulation, I prefer to leave open the question of which was the reason for this switch. Whatever be that reason, one clearly discovers in the present case a proof that double translations gave rise to different variants in later copying: either the double translation was as such preserved, as shown in copy B, or only one of the two

³⁴ Regarding parts translated at Toledo, see e.g. AVICENNA LATINUS, *Liber de anima seu sextus de Naturalibus* IV-V, I-III, ed. S. VAN RIET. Introduction doctrinale par G. VERBEKE, Peeters - Brill, Louvain - Leiden 1968-1972, p. 256, N°. 479, respectively p. 352, N°. 595 (where one also finds two alternative translations, but in isolated form, namely 'passibilis' and 'passivus'), or AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina* I-X. Lexiques, ed. S. VAN RIET, Peeters - Brill, Louvain-la-Neuve - Leiden 1983, p. 96, N°. 656. As to the translations related to Burgos, see AVICENNA LATINUS, *Liber tertius Naturalium. De generatione et corruptione* cit., p. 214, N°. 507 (where one finds in addition the translations 'receptor operis' or 'recipiens operationem', and even those of 'separatur' [but, in all likelihood, the Latin translator has here read *munfa'il* instead of *munfa'il* — from a graphical point of view both Arabic terms are very similar and hence can be easily confused] and 'dependens' [maybe due to a free rendering related to the context]). AVICENNA LATINUS, *Liber quartus Naturalium. De actionibus et passionibus* cit., p. 145, N°. 480 (on occasion the alternative translation 'recipit actionem' is offered).

terms was taken over, as shown in copy A. Since here both copies are by one and the same hand, it is beyond any reasonable doubt that the copyist made his own choices when making each of the two copies. It is worthwhile to stress that the given double translation, as indicated above, was formulated by the translators themselves and, hence, was present in the exemplar of the translation.

CONCLUSION

Many mysteries surround the medieval translation into Latin of Avicenna's *Physics*. Having been accomplished in two phases, distinguished from each other by almost a century, it is far from being clear why the first phase was ended abruptly, and also why the later phase did not cover the complete remaining text, but was restricted to the translation of a few more chapters. Given Avicenna's status as an 'auctoritas', it is also surprising that the work received relatively little attention in the Latin world, especially when compared to Avicenna's *De anima* and *Philosophia prima*. Finally, in spite of a great distance in time, the same basic translation techniques (and some peculiarities related to them) are at work in both phases. However, one detects important changes in the translation of some technical terms and, surprisingly, a greater fluidity in terminology in the later Burgos phase than in the previous Toledo stage.

ABSTRACT

The Liber primus naturalium, i.e., the Physics of the Avicenna latinus

The Latin translation of *Al-Samā' al-ṭabī'ī* of Ibn Sīnā's major work *Al-Šifā'* is unique insofar as it has been translated in two phases at different places, i.e. Toledo and Burgos, and in different times, i.e. second half of the twelfth century and ca. 1270-1275. Moreover, it was never translated in its entirety. Despite the absence of any clear evidence, a plausible reason is sought for both the sudden stopping of the Toledo translation and the (at first sight, conscious) putting into end of the Burgos translation. It is, moreover, shown that the translation had only a limited influence on the Latin world. Finally, great attention is paid to the translation techniques, especially the phenomenon of 'double translation'. Generally speaking, one discovers many common elements between the translation techniques used in both phases of the translation. The only major difference seems to consist in a greater fluidity in translating technical terms in the later Burgos translation than in the earlier Toledo translation.

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ALESSIA ASTESIANO

L'inizio di un movimento nella fisica del continuo: Avicenna lettore di Aristotele (*Libro della guarigione, Fisica, III, 6*)*

1. INTRODUZIONE

L'inizio di un movimento costituisce una questione spinosa per chi, fin dall'antichità, ha cercato di interpretare tempo e movimento come dotati di struttura continua¹. La problematicità della questione emerge in particolare quando si considera la successione di due movimenti oppure il passaggio da uno stato di quiete al movimento. Che cosa succede per esempio quando un mobile smette di essere fermo e inizia a muoversi? Come si può considerare l'istante che discrimina i due stati del mobile? Se esso è lo stesso per entrambi gli stati, si verifica la situazione paradossale di un mobile che è contemporaneamente in quiete e in movimento. Se si tratta di due istanti distinti, disposti uno dopo l'altro, si verifica la situazione altrettanto paradossale di un tempo che intercorre tra i due istanti, nel quale il mobile non può essere detto né in quiete né in movimento².

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¹ Sull'esposizione dei problemi relativi all'inizio (e alla fine) del cambiamento, si vedano R. SORABJI, *Time, Creation and the Continuum: Theories in Antiquity and the Early Middle Ages*, Duckworth, London 1983, p. 403, e l'introduzione a cura dello stesso Sorabji in SIMPLICIUS, *On Aristotle's Physics* 6, tr. D. KONSTAN, Cornell University Press, Ithaca, NY 1989, pp. 2-3.

² Un'esposizione del problema in termini simili si trova nella parafrasi alla *Fisica* di Aristotele di Temistio, in *Phys.*, pp. 194.29 - 195.5 (i passi della parafrasi sono citati secondo l'edizione THEMISTIUS, *In Aristotelis physica paraphrasis*, ed. H. SCHENKL, Reimer, Berlin 1900 [CAG V, 2]).

Il problema dell'inizio del movimento è affrontato da Avicenna nel capitolo 6 del III trattato della *Fisica* (*al-Samā' al-ṭabī'i*) del *Libro della guarigione* (*Kitāb al-Šifā'*), nei passi che sono oggetto di analisi nel presente contributo³. Come si vedrà, Avicenna si inserisce all'interno di una tradizione che affronta il problema soprattutto dal punto di vista di una disambiguazione terminologica: la strategia è quella di precisare che cosa si intende per inizio del movimento per trovare una soluzione al problema. Si capisce allora perché, in un contesto di questo tipo, le espressioni usate e la terminologia impiegata sono di grande importanza per chiarire il pensiero dell'autore, dal momento che esse riflettono determinate scelte dottrinali. In questa prospettiva, un attento esame del testo consente di mettere in luce questi aspetti.

Il testo della *Fisica* dello *Šifā'* è accessibile in più edizioni, la litografia di Teheran (1886)⁴ e due edizioni contemporanee, dotate di apparato di varianti: l'edizione del Cairo (1983) a cura di S. Zāyid⁵ e l'edizione di Beirut (1996) a cura di Ğ. Āl Yāsīn⁶. Esiste anche una traduzione inglese (2009), con testo arabo a fronte, a cura di J. McGinnis⁷, che non si propone di fornire un'edizione critica (traduce infatti il testo dell'edizione di Beirut), ma interviene su singoli punti apportando correzioni sulla base del confronto con l'edizione del Cairo, la litografia di Teheran e la traduzione latina⁸.

Nell'esaminare i passi di Avicenna relativi all'inizio del movimento, ho considerato, oltre alle edizioni menzionate, i venti manoscritti arabi più antichi a me noti che conservano il testo della *Fisica* dello *Šifā'*, diciotto dei quali non sono stati presi in esame nelle precedenti edizioni del testo⁹. La selezione dei venti manoscritti è stata condotta secondo un criterio cronologico: in mancanza di uno studio dei rapporti genealogici tra tali manoscritti, si è data la precedenza ai codici la cui data di copia fosse nota e più antica¹⁰.

³ La traduzione italiana dei passi è fornita in appendice.

⁴ IBN SİNĀ, *al-Ṭabī'īyyāt min al-Šifā'*, Teheran 1886.

⁵ IBN SİNĀ, *al-Šifā'*, *al-Ṭabī'īyyāt*, 1. *al-Samā' al-ṭabī'i*, ed. S. ZĀYID, Cairo 1983.

⁶ IBN SİNĀ, *al-Samā' al-ṭabī'i min Kitāb al-Šifā'*, ed. Ğ. ĀL YĀSĪN, Dār al-Manāhil, Beirut 1996.

⁷ AVICENNA, *The Physics of The Healing. A parallel English-Arabic text translated, introduced, and annotated* by J. MCGINNIS, 2 vols., Brigham Young University Press, Provo, Utah 2009.

⁸ MCGINNIS, *Physics* cit., p. xxxii.

⁹ Per i manoscritti considerati nelle edizioni del Cairo e di Beirut, si vedano ZĀYID, *al-Samā'* cit., p. zāy; A. HASNAWI, *La définition du mouvement dans la Physique du Šifā' d'Avicenne*, « Arabic Sciences and Philosophy », 11, 2001, pp. 219-255, in particolare p. 240 n. 56; ĀL YĀSĪN, *al-Samā'* cit., pp. 23-27.

¹⁰ La datazione dei manoscritti che contengono anche l'*Ilāhiyyāt* del *Kitāb al-Šifā'* si basa su quella registrata sul sito web del progetto Phibor: <http://www.avicennaproject.eu/index.php?id=61> (ultimo accesso: 01/07/17). Per quanto riguarda i manoscritti che non contengono l'*Ilāhiyyāt*, la fonte da cui è ricavata la datazione è riportata nelle note alla tabella.

Manoscritti consultati, disposti in ordine cronologico secondo la data di copia¹¹:

	Manoscritto	Sigla	Datazione
1)*	Oxford, Bodleian Library, Pococke 125	Poc125	561H/1166 o 571H/1175
2)	Londra, British Museum (ora: British Library, Oriental and India Office Collections), Or. 113	Or113	576H/1180-1 ^a
3)	Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 825	Da825	655H/1257-8 ^b
4)	Istanbul, Nuruosmaniye Kütüphanesi 2710	Nur2710	666H/1267-8
5)	Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2442	Aya2442	671-4H/1272-6
6)	Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3261	Top3261	677H/1278-9 ^c
7)	Istanbul, Süleymaniye Kütüphanesi, Carullah 1424	Car1424	693H/1293-4
8)	Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 823	Da823	697H/1297-8
9)*	Cairo, Maktabat al-Azhar al-Şarīf, Beḥīṭ 331 <i>falsafa</i>	Be331	VII/XIII
10)	Istanbul, Beyazıt Kütüphanesi (ex: 'Umūmī) 3967	Bey3967	VII/XIII ^d
11)	Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2441	Aya2441	VII/XIII ^e
12)	Khoy, Kitābhānah-i Madrasa-i Namāzī 248	Na248	VII/XIII
13)	Rampur, Rampur Raza Library 3476 ح (ḥikma 112)	Ra3476	718H/1318-9
14)	Teheran, Kitābhānah-i Maḡlis-i Shūrā-yi Millī 135	Maj135	871H/1467

¹¹ Sono segnati con asterisco i manoscritti presi in esame anche nelle edizioni del Cairo e di Beirut.

15)	Istanbul, Süleymaniye Kütüphanesi, Şehit Ali Paşa 1748	Su1748	879H/1474
16)	Teheran, Kitābhānah-i Millī Malik 1243	Mal1243	880H/1475-6 ^f
17)	Leiden, Universiteitsbibliotheek, Or. 84	Or84	881H/1476
18)	Dublino, Chester Beatty Library, Arabic 5412	Du5412	885H/1480
19)	Baghdad, Maktabat al-Awqāf 5353	Ba5353	885H/1480-1
20)	Leiden, Universiteitsbibliotheek, Or. 4	Or4	prima del X/XVI

^a Cfr. W. CURETON, *Catalogus codicum manoscriptorum orientalium qui in Museo Britannico asservantur. Supplementum quatuor auctum appendicibus, cui accedunt addenda et corrigenda, necnon index triplex, in universum catalogum MSS. Arabicorum*, Londini 1871, p. 745 : « Deficit, folio lacero, numerus anni centenarius, quem tamen ex scripturae specie conijcimus legendum esse 576 ».

^b Cfr. G. C. ANAWATI, *Essai de bibliographie avicennienne*, Dār al-Ma‘ārif, Cairo 1950, p. 74.

^c Cfr. Y. MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā*, Intiṣārāt-i Dāniṣgāh-yi Tihirān, Teheran 1333HŠ/1954, p. 171.

^d Cfr. ANAWATI, *Essai cit.*, p. 75.

^e Cfr. IBN SĪNĀ, *al-Šifāʾ, al-Ṭabīʿiyyāt*, 6. *al-Nafs*, edd. G. C. ANAWATI, S. ZĀYID, Cairo 1975, p. ٢.

^f Cfr. MAHDAVĪ, *Fihrist cit.*, p. 171.

Ho tenuto poi conto anche della traduzione latina medievale, perché essa costituisce un testimone importante per la ricostruzione del testo arabo di Avicenna¹². Nel caso specifico della *Fisica* dello *Šifāʾ*, J. Janssens ha mostrato come la traduzione latina in diverse occasioni sia portatrice di varianti interessanti (a volte migliori di quelle registrate nelle edizioni del testo arabo), che meritano di essere prese in considerazione e discusse¹³. La ragione dell'importanza della traduzione latina medievale è la sua antichità; in particolare, il capitolo 6 del III trattato della *Fisica* di Avicenna fu tradotto verso la fine del XIII secolo¹⁴.

¹² Sul fatto che la traduzione latina medievale sia importante per stabilire il testo arabo di Avicenna, nel caso specifico della *Metafisica* del *Libro della guarigione*, si vedano A. BERTOLACCI, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifāʾ: A Milestone of Western Metaphysical Thought*, Brill, Leiden – Boston 2006, pp. 486 e ss., e ID., *How Many Recensions of Avicenna's Kitāb al-Šifāʾ?*, « Oriens », 40, 2012, pp. 275-303, in particolare p. 278.

¹³ J. JANSSENS, *The Latin Translation of the Physics: A Useful Source for the Critical Edition of the Arabic Text?*, « Oriens », 40, 2012, pp. 515-528, in particolare significativo il caso 10, riportato alle pp. 526-527.

¹⁴ La traduzione latina fu realizzata in Spagna, a Burgos, tra il 1275 e il 1280. È conservata in un unico manoscritto, il Vat. Urb. Lat. 186. La traduzione si ferma alla fine del capitolo decimo del III trattato, al termine del quale sono riportati i nomi dei due traduttori, 'Magister Johannes Gunsalvi' e 'Salomon'. La versione latina dei trattati I e II e dell'inizio del trattato III fu invece realizzata a Toledo, probabilmente verso la fine del XII secolo. Per ulteriori informazioni sulla traduzione

La traduzione latina fu pertanto eseguita a partire da un manoscritto arabo anteriore a tale data; consente quindi di risalire a uno stadio antico della trasmissione del testo.

2. IL CONTESTO

Nel capitolo in cui Avicenna si concentra sulla questione dell'inizio di un movimento (il capitolo 6 del trattato III, come abbiamo detto), si nega l'esistenza dell'inizio di un movimento, se inteso come 'prima parte' del movimento. Vedremo in seguito quali sono le ragioni che portano Avicenna a sostenere tale tesi. Per ora, ciò che è importante sottolineare è che tale caratteristica del movimento (*ḥaraka*), quella di non avere una prima parte, dipende strettamente dalla sua struttura, cioè dal fatto di essere continuo e infinitamente divisibile. Lo stesso discorso vale per la distanza spaziale (*masāfa*) e per il tempo (*zamān*), dal momento che sono anch'essi continui e infinitamente divisibili. Per capire le ragioni che portano Avicenna a negare l'esistenza di una prima parte di queste realtà fisiche, occorre allora ricordare cosa intenda per 'continuo'.

Avicenna, nel capitolo 2 del trattato III, spiega che 'continuo' (*muttaṣīl*) è un termine che può essere inteso in più modi¹⁵. Lo si può intendere in senso relazionale, cioè quando è detto di una cosa in rapporto a un'altra, oppure può essere detto della cosa in se stessa. Dei significati di continuo in senso relazionale uno in particolare è di nostro interesse: una cosa è detta continua a un'altra quando il limite (*ṭaraf*) della prima è una cosa sola col limite della seconda¹⁶. Due cose continue una all'altra possono poi essere tali per accidente (*bi-l-'araḍ*)¹⁷. Questo tipo di continuità accidentale si verifica per esempio quando immaginiamo una linea e al suo interno distinguiamo due parti tramite supposizione (*bi-l-farḍ*),

latina, si vedano: J. JANSSENS, *L'Avicenne latin : particularités d'une traduction*, in J. JANSSENS, D. DE SMET eds., *Avicenna and His Heritage*, Leuven University Press, Leuven 2002, pp. 113-129; Id., *The Reception of Avicenna's Physics in the Latin Middle Ages*, in A. VROLIJK, J. P. HOGENDIJK eds., *O ye Gentlemen: Arabic Studies on Science and Literary Culture in honour of Remke Kruk*, Brill, Leiden - Boston 2007, pp. 55-64; Id., *The Latin Translation of the Physics* cit.; Id., *The Physics of the Avicenna Latinus and Its Significance for the Reception of Aristotle's Physics in the West*, in A. VAN OPPENRAAY, R. FONTAINE eds., *The Letter before the Spirit: The Importance of Text Editions for the Study of the Reception of Aristotle*, Brill, Leiden - Boston 2012, pp. 311-330.

¹⁵ Av., *al-Samā' al-ṭabī'ī* (d'ora in avanti *Samā'*), III, 2, p. 182.1 e ss.; i passi della *Fisica* di Avicenna sono sempre citati seguendo l'edizione del Cairo, eccetto dove indicato diversamente. Per un'analisi completa dei sensi di continuo, si vedano J. MCGINNIS, *Avicenna*, Oxford University Press, Oxford 2010, pp. 75-79, e Id., *Avicenna's Natural Philosophy*, in P. ADAMSON ed., *Interpreting Avicenna. Critical Essays*, Cambridge University Press, Cambridge 2013, pp. 71-90, in particolare pp. 75-78.

¹⁶ Av., *Samā'*, III, 2, p. 182.3.

¹⁷ Av., *Samā'*, III, 2, p. 182.6-9.

individuando per ciascuna un limite che è anche il limite dell'altra. Le due parti della linea potranno allora essere dette continue (hanno infatti un limite in comune), ma saranno tali solo per accidente. Ognuna delle parti individuate in questo modo, infatti, esiste soltanto finché l'attività di supporre il limite comune è in corso: quando cessa l'attività mentale di chi divide, non esistono più al suo interno parti distinte e si ha di nuovo la linea intera¹⁸.

Consideriamo ora il senso di 'continuo' detto della cosa considerata in se stessa, non in rapporto ad altro. Qualcosa è detto continuo in questo senso, se è possibile individuare al suo interno, tramite supposizione, parti che siano continue le une con le altre secondo il senso relazionale di continuo visto in precedenza; si tratta quindi di parti che hanno tra loro un limite in comune ed esistenti per accidente¹⁹. La cosa detta continua in questo senso ha poi, come proprietà, quella di essere divisibile in parti che sono sempre ulteriormente divisibili²⁰; in altre parole essa è divisibile all'infinito.

Quest'ultimo punto è importante: il fatto di concepire ciò che è continuo come ciò che è infinitamente divisibile significa escludere la possibilità che un continuo sia divisibile in parti atomiche. Non a caso infatti Avicenna dedica i successivi tre capitoli (3, 4, 5) del trattato III a confutare le posizioni di chi ritiene che i corpi non siano divisibili all'infinito, ma composti da costituenti indivisibili²¹.

È questo il contesto in cui si inserisce il capitolo 6 che stiamo per esaminare²². Qui si vedrà che la continuità è per Avicenna (come già per Aristotele) una struttura che caratterizza anche la distanza spaziale, il tempo e il movimento.

¹⁸ Av., *Samā'*, III, 2, p. 182.8-9.

¹⁹ Av., *Samā'*, III, 2, p. 183.7-8.

²⁰ Av., *Samā'*, III, 2, p. 183.9. Cfr. ARIST., *Phys.*, VI, 1, 231b16 (i passi della *Fisica* di Aristotele sono sempre citati seguendo l'edizione *Aristotle's Physics. A revised text with introduction and commentary*, ed. W. D. ROSS, Clarendon Press, Oxford 1936): πᾶν συνεχὲς διαίρετόν εἰς αἰεὶ διαίρετά, «ogni continuo è divisibile in [parti] sempre divisibili». Questo processo di divisione può essere ripetuto all'infinito e ogni volta vale la proprietà dell'essere sempre ulteriormente divisibile: quando si divide un continuo, dalla sua suddivisione si otterranno sempre continui.

²¹ Per un'analisi di questi capitoli, si veda P. LETTINCK, *Ibn Sīnā on Atomism. Translation of Ibn Sīnā's Kitāb al-Shifā', al-Ṭabī'īyyāt: al-Samā' al-ṭabī'ī, Third Treatise, chapters 3-5*, «al-Shajarah», 4, 1999, pp. 1-51.

²² Sul contenuto del trattato III in generale, si veda A. HASNAWI, *Commentaire et démonstration. Brèves remarques sur la Physique du Šifā' d'Avicenne*, in M.-O. GOULET-CAZÉ ET AL. éds., *Le commentaire entre tradition et innovation: actes du colloque international de l'Institut des traditions textuelles* (Paris et Villejuif, 22-25 septembre 1999), Vrin, Paris 2000, pp. 509-519.

3. LA CORRISPONDENZA DI DISTANZA, TEMPO E MOVIMENTO NELLA DIVISIBILITÀ ALL'INFINITO

Per dimostrare che il movimento, nel significato di 'percorrere una distanza' (*bi-ma 'nà l-qaṭ*)²³, è continuo e quindi infinitamente divisibile, Avicenna si serve del seguente ragionamento²⁴. Si considerino una distanza e un movimento; si assuma che il movimento sia indivisibile e la distanza divisibile²⁵. Della distanza è allora possibile individuare una parte, che sarà minore della distanza totale. Quale sarà il movimento con cui il mobile attraversa quella distanza parziale? Di certo non sarà il movimento totale, perché con quello il mobile percorre la distanza intera. Si dovrà allora ammettere che la distanza parziale sia percorsa con un movimento che è parte del movimento totale. Ma si era posto all'inizio che quel movimento fosse indivisibile, e quindi privo di parti. L'assunto iniziale, dunque, dev'essere falso. Il movimento sarà allora divisibile, e in particolare infinitamente divisibile, proprio come la distanza percorsa²⁶. Questo argomento mostra che non può esserci discrepanza in termini di divisibilità tra distanza e movimento: se la prima è divisibile, deve esserlo anche il secondo. La discrepanza nella struttura dei due enti porta a un assurdo.

A questo punto diventa chiaro che cosa intenda Avicenna, nel titolo del capitolo 6²⁷, con 'corrispondenze' (*munāsabāt*) tra distanza e movimento (e tempo): si tratta di una corrispondenza che riguarda la loro divisibilità all'infinito.

²³ La precisazione che Avicenna introduce sul tipo di movimento che ha in mente è molto importante. Avicenna, infatti, (come è evidenziato da HASNAWI, *La définition du mouvement* cit., pp. 228-234) prospetta due differenti modi di intendere il movimento: nel senso di 'percorso' e come 'stato intermedio' (indicati rispettivamente da Hasnawi come 'movimento 1' e 'movimento 2'). Il movimento di cui sta parlando Avicenna nel contesto del capitolo 6 è il 'movimento 1'. Esso è inteso come una realtà continua che si estende dal punto di inizio fino al termine di quel movimento e che può essere concepito nella sua interezza solo quando il mobile ha già raggiunto il punto finale. In questo punto il movimento non esiste già più, perché il mobile ha terminato il suo percorso. Il movimento in questo senso può avere solo un'esistenza mentale: il movimento che il mobile ha percorso si è impresso nell'immaginazione, la quale a posteriori è in grado di 'ricostruirlo' concependolo come una grandezza continua. Il 'movimento 2' è invece il movimento inteso come lo stato intermedio di un mobile che si trova nel corso del suo movimento, in una posizione tra il punto d'inizio e il punto finale del suo movimento. Esiste nel mobile e ha una realtà extramentale. Nelle opere post-avicenniane i due tipi di movimento sono indicati rispettivamente con le espressioni *ḥaraka qaṭ 'iyya* e *ḥaraka tawassuṭiyya*; cfr. A. Q. AHMED, *The Reception of Avicenna's Theory of Motion in the Twelfth Century*, « Arabic Sciences and Philosophy », 26, 2016, pp. 215-243, in particolare pp. 224-225.

²⁴ Av., *Samā'*, III, 6, p. 203.5-8.

²⁵ La possibilità che la distanza sia indivisibile è subito scartata: Avicenna ha già argomentato la sua posizione in merito nel corso delle sue critiche all'atomismo nei capitoli precedenti. Cfr. per esempio Av., *Samā'*, III, 5, p. 199.9-10.

²⁶ Avicenna fa qui ricorso a una dimostrazione che, nella sua struttura, ricalca quella usata da Aristotele per provare la reciproca divisibilità all'infinito delle cose relative al movimento (cioè di tempo, distanza, mobile...). Questo tipo di dimostrazione è ricorrente nel libro VI della *Fisica*, tanto che Aristotele stesso ne parla come di 'ragionamenti abituali' (ἐκ τῶν εἰωθότων λόγων, 233a13).

²⁷ Av., *Samā'*, III, 6, p. 203.3-4: « Sulle corrispondenze tra le distanze, i movimenti e gli intervalli di tempo relativamente a questa disposizione, ed è chiaro che nessuno di questi ha una prima parte ».

Avicenna prosegue poi precisando che la divisibilità del movimento dipende non solo dalla divisibilità della distanza, ma anche da quella del tempo²⁸. Dimostra infatti che distanza e tempo sono entrambi divisibili, facendo ricorso a un argomento che si basa sulla differenza di velocità di due mobili²⁹. Se si considerano un movimento veloce e uno lento, la distanza percorsa dal mobile lento in un dato tempo sarà più breve della distanza coperta dal mobile veloce nello stesso tempo. Questo significa che il mobile lento consente di individuare una porzione inferiore di distanza percorsa, e quindi di dividerla. Dall'altro lato, il mobile veloce percorrerà quella distanza in un tempo inferiore rispetto a quello impiegato dal mobile lento; consente quindi di dividere il tempo. Si può procedere così all'infinito, considerando alternativamente il mobile lento e il mobile veloce: di volta in volta l'uno consentirà di dividere la distanza percorsa dall'altro, mentre quest'ultimo dividerà il tempo di quello. Ponendo quindi in rapporto due mobili che si muovono a velocità differenti, Avicenna riesce a dimostrare la corrispondenza nella divisibilità di distanza e tempo³⁰. Con questa dimostrazione e con la precedente, è dunque riuscito a mostrare come dalla divisione di una delle realtà fisiche, presa tra distanza, tempo e movimento, dipenda strettamente la divisibilità delle altre due.

A proposito dell'analoga posizione aristotelica in merito alla divisibilità di grandezza, tempo e movimento³¹, gli interpreti spesso parlano di 'isomorfismo', usato nel senso di 'uguaglianza nella struttura'³². Questo è senz'altro vero, ma ciò su cui si deve porre l'accento è l'interdipendenza di grandezza, tempo e movimento che Aristotele pone. Ciò che è importante sottolineare, infatti, è non solo che queste tre realtà fisiche sono caratterizzate dalla stessa struttura, ma che questa struttura comune deriva a ciascuna di esse per il fatto di appartenere anche alle altre³³. In questo senso è da intendere il rapporto tra distanza, tempo e movimento anche in Avicenna: occorre porre l'accento sulle *munāsabāt* che legano tutte e tre le realtà fisiche dal punto di vista della divisibilità.

²⁸ Av., *Samāʿ*, III, 6, p. 203.8-9.

²⁹ Av., *Samāʿ*, III, 6, p. 203.9-11.

³⁰ Aristotele, in *Phys.*, VI, 2, 233a5-12, si serve di questo stesso argomento del movimento veloce e del movimento lento per provare la divisibilità di distanza e tempo.

³¹ Cfr. Ar., *Phys.*, VI, 1, 231b18 e ss.

³² Si vedano, per esempio, M. DUFOUR, *Aristote : la Physique, livre VI, tome 1 : Introduction et traduction*, L'Harmattan, Paris 2014, pp. 89-90, ed EAD., *Aristote : la Physique, livre VI, tome 2 : Commentaire*, L'Harmattan, Paris 2014, p. 68.

³³ Come scrive Wieland (W. WIELAND, *Die aristotelische Physik*, Vandenhoeck & Ruprecht, Göttingen 1962, pp. 290-291), la continuità per Aristotele assume rilevanza non in quanto 'qualità' appartenente a grandezza, tempo e movimento considerate singolarmente, ma essa emerge in quanto queste tre realtà sono poste in relazione tra loro.

4. L'INIZIO DI UN MOVIMENTO

Avicenna ha mostrato che se, come è vero, distanza e tempo sono infinitamente divisibili, allora anche il movimento è infinitamente divisibile. Da questa proprietà ne derivano altre, tra cui il fatto che non è possibile individuare una prima parte del movimento. Avicenna dimostra ciò nel seguente modo³⁴: ogni movimento deve — date le corrispondenze illustrate prima — svolgersi in un tempo infinitamente divisibile³⁵. Il fatto che si svolga nel tempo fa sì che le parti della distanza percorsa con quel movimento siano ordinate secondo un prima e un dopo. Se quindi dovesse esistere un primo movimento di quel movimento, esso avrebbe senza dubbio luogo nella parte di distanza che è percorsa per prima. Ma quella distanza è anch'essa — come si è visto in precedenza — divisibile all'infinito. Questo significa che è possibile dividerla ulteriormente e individuare così una 'nuova' prima parte della distanza; il movimento che sarà impiegato per percorrerla sarà allora un primo movimento a maggior diritto rispetto al movimento che era stato detto primo in precedenza. Si può così procedere all'infinito a dividere la distanza, senza mai trovare di essa una prima parte né la prima parte del movimento che le corrisponda. Il senso dell'argomento è chiaro; occorre tuttavia soffermarsi sul testo del passo, per definire più precisamente il significato di un'espressione che qui compare e che non è di immediata comprensione.

T.1 Av., *Samāʿ*, III, 6, p. 204.6-7:

<p>فمحال أن يكون للحركة شيء هو أول ما يحركه المتحرك، وذلك لأنه إن كان حركة هي أول حركة، فإنها لا محالة في مسافة، وتلك المسافة منقسمة بالقوة.</p>	<p>È impossibile che il movimento abbia qualcosa che sia أول ما يحركه المتحرك. Questo perché, se ci fosse un movimento che è un primo movimento, esso senza dubbio sarebbe in una distanza, e quella distanza è divisibile in potenza.</p>
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³⁴ Av., *Samāʿ*, III, 6, 204.5-9.

³⁵ Cfr. il principio di Aristotele per cui ogni cambiamento richiede tempo e nulla si muove in un istante (*Phys.*, VI, 3, 234a24). A questo proposito, è importante ricordare la precisazione che Avicenna introduce all'inizio del capitolo: in questo contesto si sta parlando di movimento nel senso di 'percorrere una distanza' (*bi-ma nà l-qatʿ*, p. 203.5-6). Questo tipo di movimento, 'il movimento 1' (secondo la distinzione in HASNAWI, *La définition du mouvement* cit.), si svolge nel tempo. Nel caso del 'movimento 2', invece, il discorso è diverso; per una discussione su questo punto, si veda HASNAWI, *La définition du mouvement* cit., pp. 234-235. Sul movimento in un istante in Avicenna, si veda anche J. MCGINNIS, *On the Moment of Substantial Change. A Vexed Question in the History of Ideas*, in J. MCGINNIS ed., *Interpreting Avicenna: Science and Philosophy in Medieval Islam*, Brill, Leiden - Boston 2004, pp. 42-61.

L'espressione che nell'edizione del Cairo compare come *أول ما يحركه المتحرك* merita attenzione (per ora non la traduco per via dell'ambiguità semantica che sto per chiarire). Sulla base del contesto della frase è possibile intuire che con questa espressione si intende una parte di movimento, che è movimento essa stessa, e in particolare quella parte di movimento che ha luogo nella prima parte della distanza percorsa. Questa parte di movimento è chiamata anche, subito dopo, 'primo movimento' (أول حركة). A che cosa si riferisca questa espressione è dunque chiaro. Vediamo ora come è possibile intenderla e tradurla.

Se si considera il testo così come è riportato dall'edizione del Cairo, cioè *أول ما يحركه المتحرك*, si prospettano diverse possibili interpretazioni, a seconda di come si intenda il verbo.

(a) Se si intende il verbo in senso transitivo, allora il verbo sarà una II forma con significato attivo: *يُحَرِّك*, 'muove'. Il soggetto sarà *المتحرك* e il complemento oggetto sarà il pronome suffisso *هـ* (il quale rimanda ad *أول ما* che a sua volta si riferisce a *شيء*, che qui indica una parte del movimento). L'espressione sarà tradotta quindi con 'la prima [cosa] che il mobile muove'³⁶. Intesa in questo modo, però, l'espressione è problematica; si tratterebbe infatti di considerare il mobile come soggetto di *يُحَرِّك*, cioè come ciò che muove una parte di movimento. Il mobile in quanto tale, però, non muove, la sua azione è soltanto quella di essere in movimento, di muoversi.

(b) Se si tralascia allora, come meno probabile, il significato transitivo del verbo, è possibile intendere l'espressione considerando il verbo *يَحْرُك* in senso intransitivo. In tal caso si prospettano due possibilità. (b.1) La prima consiste nel considerare il verbo una I forma al tempo imperfetto, *يَحْرُك*, 'si muove'³⁷. (b.2) La seconda possibilità consiste nell'interpretare il verbo come una V forma al tempo perfetto, *تَحْرَك*, 'si è mosso'³⁸. In questo caso l'unica differenza rispetto al testo stampato consisterebbe nella posizione dei punti sulla prima lettera del verbo (si tratta di leggere *tā'* al posto di *yā'*), mentre il *rasm* resta invariato. La possibilità che in questa espressione si possa leggere un verbo in V forma è supportata da parte della tradizione manoscritta. Il prospetto delle varianti in

³⁶ Su questa linea interpretativa sembra collocarsi MCGINNIS, *Physics* cit., p. 313, che stampa nel testo a fronte della sua traduzione *يَحْرُكْه* (seguendo il testo dell'edizione di Beirut), e traduce: 'it would be absurd that the motion should have something that is the first that the mobile moves' (corsivo mio).

³⁷ La prima forma ha lo stesso significato della V forma del verbo, ma è più rara di quest'ultima; cfr. E. W. LANE, *An Arabic-English Lexicon*, part 2, Williams and Norgate, London 1865, rist. Librairie du Liban, Beirut 1968, p. 553.

³⁸ Per quanto riguarda la denominazione dei due tempi verbali dell'arabo, 'perfetto' e 'imperfetto', seguo W. WRIGHT, *A Grammar of the Arabic Language*, vol. I, Cambridge University Press, Cambridge 1896³, p. 51.

particolare è il seguente³⁹:

أول ما يحركه المتحرك	Poc125, Or113, Da825, Aya2442, Top3261, Car1424, Be331, Bey3967, Aya2441, Ra3476, Mal1243, Or84
أول ما يحركه المتحرك	Zāyid
أول ما يحركه المتحرك	litografia Teheran (sic)
أول ما يحركه المتحرك	Ba5353, Āl Yāsīn, McGinnis
أول ما يحركه المتحرك	Da823
أول ما تحركه المتحرك	Nur2710, Or4
أول ما يتحركه المتحرك	Na248, Maj135, Su1748, Du5412
primum movens mobile	Lat.

La maggior parte dei testimoni consultati non presenta punti in corrispondenza della prima lettera del verbo. Per questo motivo, anche su questo campione ristretto di testimoni, è impossibile stabilire quale sia la forma del verbo maggiormente attestata. Occorre pertanto prendere in considerazione tutte e tre le possibili interpretazioni prospettate e valutarle sulla base di altri criteri.

(a) La II forma in senso transitivo in questo contesto sembra meno probabile, per le ragioni già viste. Anche la traduzione latina sembra leggere o interpretare il verbo arabo come una II forma transitiva: ‘primum movens mobile’, ‘la prima cosa che muove il mobile’. Il testo che traduce, però, evidentemente non riportava il pronome personale suffisso ه, così che المتحرك, cioè il mobile, diventa complemento oggetto. Questa lezione, però, non è attestata da altri testimoni (tra quelli presi in esame). Per questo motivo vale la pena considerare se le altre strade proposte dalla tradizione manoscritta siano percorribili.

(b) Consideriamo allora la possibilità che il verbo abbia un significato intransitivo (sia esso alla V forma o alla I). In questo caso, occorre giustificare la presenza del pronome suffisso ه. Come si è già detto in precedenza, il pronome suffisso in questa espressione si riferisce in ultima analisi a شيء, che in questo passo indica una parte del movimento, essa stessa movimento. Occorre allora

³⁹ Riporto l'espressione così come compare nei venti manoscritti arabi menzionati nell'introduzione, unitamente alla sua resa nella traduzione latina medievale. Segnalo anche come è stampata l'espressione nella litografia di Teheran, nelle edizioni del Cairo e di Beirut, e nel testo a fronte della traduzione di McGinnis.

valutare l'ipotesi che il verbo col significato intransitivo regga un accusativo indicante il movimento.

(b.2) Consideriamo dapprima il caso del verbo 'muoversi' espresso in arabo con una V forma del verbo. Alcuni passi in Avicenna stesso indicano che questo costruito è possibile:

Av., *Nafs (Anima)*, I, 2, p. 26.15-17⁴⁰:

و أما الذين جعلوا النفس جسما يتحرك بحركته
المستديرة التي يتحركها على الأشياء ليدرك بها
الأشياء فسنبين بعد فساد قولهم حين نبين أن
الإدراك العقلي لا يجوز أن يكون بجسم.

Per quanto riguarda quelli che considerano l'anima un corpo che si muove con il suo movimento circolare di cui si muove intorno alle cose, per cogliere per mezzo di esso [scil. del movimento] le cose, spiegheremo in seguito la falsità del loro discorso nel momento in cui chiariremo che la comprensione intellettuale non può avvenire per mezzo del corpo.

In questo passo il verbo è alla V forma e compare in unione col pronome suffisso ها che rimanda al sostantivo حركة che compare in precedenza. Il significato è quello di 'muoversi di un movimento circolare'. Troviamo una costruzione analoga anche nel passo seguente:

Av., *Qiyās (Sillogismo)*, IV, 5, p. 218.8-10⁴¹:

فإنه ليس كل ما يوصف بأنه يقظان يتحرك
حركة اليقظة ما دامت ذاته موجودة بالضرورة،
كان يقظان أو لم يكن، بل إنما يتحركها ما دام
يقظان.

Infatti non tutto ciò a cui è attribuito il fatto di essere sveglio si muove necessariamente del movimento della veglia per tutto il tempo in cui esso stesso esiste, che sia sveglio o che non lo sia, ma si muove di esso [scil. del movimento] solo per il tempo in cui è sveglio.

Questo tipo di costruzione è anche attestata nella traduzione araba della *Fisica* di Aristotele⁴². Anche se non sappiamo in quale traduzione Avicenna leggesse il

⁴⁰ F. RAHMAN, *Avicenna's De anima*, Oxford University Press, London 1959.

⁴¹ IBN SİNĀ, *Al-Šifā', al-Mantiq, al-Qiyās*, ed. S. ZĀYID, Cairo 1964.

⁴² La *Fisica* di Aristotele fu tradotta più volte in arabo (cfr. F. E. PETERS, *Aristoteles Arabus: the Oriental Translations and Commentaries on the Aristotelian Corpus*, Brill, Leiden 1968, pp. 32-33). L'unica traduzione che si è conservata è quella di Ishāq ibn Ḥunayn (morto nel 298H/910), che è preservata

testo aristotelico, è comunque significativo riscontrare anche in questo testo l'uso della costruzione del verbo يَحْرُكُ in V forma col sostantivo حركة.

AR., *Phys.*, VIII, 5, 257b25-26 (p. 858.7 Badawī)⁴³:

وإلا كان يتحرك الحركة التي يُحَرِّكُ	ἔτι ἢν κινεῖ κίνησιν, κινούτ' ἄν («Inoltre si muoverebbe del movimento che [esso stesso] provoca»).
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I passi menzionati mostrano quindi che è possibile dire che un mobile يتحرك حركة / تَحْرُكُ حركة, dove il verbo alla V forma, all'imperfetto o al perfetto, in unione col sostantivo 'movimento', è inteso nel significato di 'muoversi di un movimento'⁴⁴.

(b.1) A questo proposito occorre osservare che anche la I forma del verbo, che alla pari della V forma ha significato intransitivo, sembra ammettere una costruzione di questo tipo:

AV., *al-Qānūn fī l-ṭibb* (*Canone di medicina*), p. 52.13-14⁴⁵:

ثم يمشي مشياً غير متعب، أو يحرك حركة أخرى غير متعبة	Poi cammina con un andamento non stancante oppure <u>si muove di un altro</u> <u>movimento</u> non stancante.
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Sulla base di questi passi paralleli, si può dire che l'uso del verbo con significato intransitivo è possibile in questo contesto. Resta da valutare se sia preferibile la I forma all'imperfetto o la V forma al perfetto. La scelta tra le due⁴⁶

in un unico manoscritto, Leiden Or. 583, ed è stata edita da Badawī (ARISTŪTĀLIS, *al-Ṭabī'a*, tarḡamat Ishāq ibn Ḥunayn, 2 voll., ed. 'A. BADAWĪ, Cairo 1964-65). In questo manoscritto sono conservati i commenti alla *Fisica* di diversi autori, tra cui anche porzioni dei commenti di alcuni commentatori tardo-antichi. Per ulteriori informazioni sulla struttura e il contenuto di questo manoscritto, si vedano E. GIANNAKIS, *The Structure of Abū l-Ḥusayn al-Baṣrī's Copy of Aristotle's Physics*, «Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften», 8, 1993, pp. 251-258, e P. LETTINGCK, *Aristotle's Physics and Its Reception in the Arabic World*, Brill, Leiden 1994, pp. 4-6.

⁴³ Ringrazio il dott. R. Arnzen per avermi segnalato questo passo. Tutti i testi della traduzione araba della *Fisica* sono citati secondo l'edizione ARISTŪTĀLIS, *al-Ṭabī'a*, tarḡamat Ishāq ibn Ḥunayn, vol. II, ed. 'A. BADAWĪ, Cairo 1965.

⁴⁴ Questo sarebbe un caso di *maf'ūl mutlaq*, cioè di 'oggetto assoluto' (cfr. W. WRIGHT, *A Grammar of the Arabic Language*, vol. 2, Cambridge University Press, Cambridge 1898³, pp. 53-57).

⁴⁵ IBN SĪNĀ, *al-Qānūn fī l-ṭibb*, vol. 3.1, Ġāmi'a Hamdard, New Delhi 1989.

⁴⁶ Lasciamo da parte la possibilità di considerare il verbo in V forma all'imperfetto, يتحركه (lezione supportata da alcuni testimoni). Si tratta infatti di una forma che a livello semantico è analoga alla I forma all'imperfetto, ma il cui *rasm* — a differenza di quest'ultima — è attestato in modo minoritario dalla tradizione manoscritta.

non potrà essere condotta sulla base del significato proprio della forma verbale (entrambe significano ‘muoversi’), ma dovrà fare leva su altre considerazioni. Tuttavia, prima di compiere questa scelta, occorre comprendere che cosa intendesse Avicenna con أول ما ed esaminare i differenti significati che أول può assumere in riferimento al movimento.

4.1. I candidati al ruolo di inizio del movimento

Nel passo che si è esaminato, Avicenna ha mostrato che non è possibile individuare un primo movimento (أول حركة), cioè una prima parte del movimento⁴⁷. Subito dopo, però, precisa che الأول si potrebbe intendere in più modi⁴⁸. A questo proposito è importante notare l’ambiguità semantica propria del termine *awwal*, che può essere inteso sia come sostantivo, *awwalun*, nel significato di ‘inizio’ (corrispondente al greco ἀρχή), sia come aggettivo elativo, *awwalu*, col significato di ‘primo’ (corrispondente al greco πρῶτος)⁴⁹. Tenendo a mente questa distinzione è più facile capire perché Avicenna prospetti l’esistenza di più interpretazioni per questo termine.

(1) Il primo modo con cui può essere inteso è nel senso di ‘limite’ (*taraf*), quindi di limite iniziale⁵⁰. In questo caso si intende il punto di partenza del movimento: se si immagina il movimento preso in esame come il segmento di una linea, allora l’inizio del cambiamento, secondo questo primo significato, corrisponderà al punto-limite iniziale di quel segmento. È interessante notare che, a proposito di questo limite iniziale del movimento, Avicenna dice che esso ha un corrispettivo nell’istante che delimita il tempo in cui quel movimento ha luogo e nel limite iniziale della distanza percorsa con quel movimento⁵¹. Con le dimostrazioni che aprono il capitolo, Avicenna aveva sottolineato che tempo, distanza e movimento si corrispondono l’un l’altro per quanto riguarda l’infinita divisibilità. Ma questa relazione reciproca non si perde quando si parla dei loro limiti indivisibili. La corrispondenza tra le tre realtà fisiche si verifica sia quando sono considerate le loro parti estese (ci sarà allora una corrispondenza nell’infinita divisibilità) sia quando sono considerati i loro limiti (in tal caso la corrispondenza è tra indivisibili)⁵².

⁴⁷ Av., *Samāʿ*, III, 6, p. 204.5-9.

⁴⁸ Av., *Samāʿ*, III, 6, p. 204.9.

⁴⁹ Per questi due usi del termine, si veda G. ENDRESS, D. GUTAS eds., *A Greek and Arabic Lexicon* (GALex), vol. I, Brill, Leiden - New York - Köln 2002, pp. 624-635.

⁵⁰ Av., *Samāʿ*, III, 6, p. 204.10.

⁵¹ Av., *Samāʿ*, III, 6, p. 204.10-11.

⁵² Cfr. DUFOUR, *Commentaire* cit., p. 76, a proposito della presenza di un doppio isomorfismo nel libro VI della *Fisica* di Aristotele.

(2) Il secondo significato che Avicenna prospetta per l'inizio del movimento è quello a cui aveva già fatto riferimento in precedenza: si tratta della 'prima delle parti del movimento' (*awwalu aǧzā' i l-ḥarakati*), nel senso della parte del movimento che precede tutte le altre⁵³.

(3) Oltre a questi due significati per l'inizio del movimento, uno puntiforme e l'altro esteso, uno inteso come limite e l'altro come parte, Avicenna menziona anche un terzo significato. Questa terza accezione scaturisce da una considerazione più generale, condivisa da alcuni, in merito ai corpi fisici. Costoro ammettono che i corpi siano divisibili all'infinito, ma questa divisione, se procede oltre un certo limite, ha come effetto quello di compromettere la capacità del corpo in questione di supportare la forma che lo caratterizza. Questa eventualità si prospetta quando la divisione ha come esito quello di individuare parti talmente piccole che non potranno più essere portatrici della forma di partenza, cioè non potranno più essere considerate, per esempio, aria, acqua o fuoco⁵⁴. Esisterà allora per ciascun corpo, una grandezza minima; se quel corpo diventa piccolo oltre tale limite le sue dimensioni non saranno più idonee per ospitare una determinata forma, per esempio la forma del fuoco o dell'aria⁵⁵. Per gli interlocutori di Avicenna⁵⁶, se questo discorso vale per i corpi fisici, potrà valere anche per il mobile e per la distanza percorsa⁵⁷: secondo questa prospettiva, non si potrà procedere a dividerli indeterminatamente, perché per conservare le caratteristiche che sono loro proprie non potranno rimpicciolire oltre un certo limite. Si capisce allora perché, se si postula l'esistenza di un *minimum* per

⁵³ Av., *Samā'*, III, 6, p. 204.12-13.

⁵⁴ Av., *Samā'*, III, 6, p. 204.13-15.

⁵⁵ Questa concezione è conosciuta nella Scolastica come teoria dei *minima naturalia*; a questo proposito, si veda A. MAIER, *Kontinuum, Minima und aktuell Unendliches*, in *Die Vorläufer Galileis im 14. Jahrhundert*, Edizioni di Storia e Letteratura, Roma 1949, pp. 155-215. Avicenna stesso discute di tale teoria nel capitolo 12 di questo stesso trattato III; sulla sua trattazione del problema, si vedano MCGINNIS, *Avicenna's Natural Philosophy* cit., pp. 81-85, e ID., *A Small Discovery: Avicenna's Theory of Minima Naturalia*, «Journal of the History of Philosophy», 53, 2015, pp. 1-24. In quest'ultimo articolo è presente inoltre un'analisi delle premesse di tale dottrina nel mondo greco (pp. 3-8). Per una ricostruzione della concezione di Alessandro sui *minima*, si veda M. RASHED, *Alexandre d'Aphrodise, commentaire perdu à la «Physique» d'Aristote (Livres IV-VIII). Les scholies byzantines: édition, traduction et commentaire*, De Gruyter, Berlin 2011, pp. 105-109. Sulla concezione dei *minima naturalia* in Averroè, si vedano R. GLASNER, *Ibn Rushd's Theory of Minima Naturalia*, «Arabic Sciences and Philosophy», 11, 2001, pp. 9-26; EAD., *Averroes' Physics. A Turning Point in Medieval Natural Philosophy*, Oxford University Press, Oxford 2009, in particolare 'The Turning Point of Physics VII: The Breakdown of Physical Body', pp. 141-171; C. CERAMI, *Corps et continuité. Remarques sur la 'nouvelle' physique d'Averroès*, «Arabic Sciences and Philosophy», 21, 2011, pp. 299-318, in particolare pp. 314-318; EAD., *Génération et Substance: Aristote et Averroès entre physique et métaphysique*, De Gruyter, Boston - Berlin 2015, pp. 400-421 e pp. 429-436.

⁵⁶ Non sono riuscita a identificare le persone e le opere a cui Avicenna fa qui riferimento.

⁵⁷ Av., *Samā'*, III, 6, p. 204.15-16.

la distanza percorsa da un mobile, proprio in virtù delle corrispondenze che esistono tra distanza, tempo e movimento, si potrà postulare anche l'esistenza di un *minimum* del movimento⁵⁸. In questa prospettiva, quindi, un movimento, per essere considerato tale, non potrà avere una qualsivoglia estensione: può essere diviso, ma soltanto in potenza e con la facoltà immaginativa, perché un movimento più piccolo di esso non potrà avere esistenza indipendente⁵⁹.

4.1.1. L'inizio del movimento in Aristotele

Si può spiegare meglio la molteplicità di significati presentata da Avicenna per l'inizio del movimento, se si considera il libro VI della *Fisica* di Aristotele, in particolare i passi in cui tale questione è affrontata esplicitamente⁶⁰. Nel capitolo 5 del libro VI, infatti, Aristotele discute di ciò che avviene in corrispondenza dell'inizio di un movimento. In particolare, nega l'esistenza stessa dell'inizio del movimento:

AR., *Phys.*, VI, 5, 236a14-15:

οὐ γὰρ ἔστιν ἀρχὴ μεταβολῆς, οὐδ' ἐν ᾧ πρώτῳ τοῦ χρόνου μετέβαλλεν.	Non esiste infatti un inizio di un cambiamento né, per quanto riguarda il tempo, ciò in cui in primo luogo [qualcosa] cambiava.
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Aristotele sostiene quindi che non esiste un inizio di un cambiamento o di un movimento⁶¹ e che non si può neppure individuare il suo corrispettivo temporale,

⁵⁸ Sul fatto che in questo passo si faccia riferimento a un *minimum* del movimento, cfr. MCGINNIS, *Avicenna's Natural Philosophy* cit., p. 81.

⁵⁹ Av., *Samā'*, III, 6, p. 204.16-18.

⁶⁰ Il problema del primo istante del cambiamento ha ricevuto particolare attenzione nella tarda Scolastica. Come nota Murdoch a questo proposito (J. E. MURDOCH, *Infinity and Continuity*, in N. KRETMANN, A. KENNY, J. PINBORG eds., *The Cambridge History of Later Medieval Philosophy*, Cambridge University Press, Cambridge 1982, pp. 564-591, in particolare p. 585), i passi aristotelici che hanno fornito materiale per la discussione di questo tema sono due (*Phys.*, VI, 5, 235b32-236a27 e *Phys.*, VIII, 8, 263b9-26) e riportano posizioni contrastanti. Nella presente analisi prenderò in esame soltanto la trattazione fornita nel libro VI. Sulla complessa questione delle tensioni esistenti tra i libri VI e VIII della *Fisica* di Aristotele, si vedano R. SORABJI, *Aristotle on the Instant of Change*, «Proceedings of the Aristotelian Society», Suppl. 50, 1976, pp. 69-89, in particolare pp. 83-85; R. Sorabji nell'introduzione di SIMPLICIUS, *On Aristotle's Physics* 6 cit., pp. 2-3, n. 8; J. ROSEN, *Physics V-VI versus VIII: Unity of Change and Disunity in the Physics*, in M. LEUNISSEN ed., *Aristotle's Physics. A Critical Guide*, Cambridge University Press, Cambridge 2015, pp. 206-224, in particolare pp. 220-222.

⁶¹ In *Phys.*, V, 1, 225a34-225b9, Aristotele precisa il significato di μεταβολή, 'cambiamento', e κίνησις, 'movimento'. I tipi di cambiamento sono quattro: cambiamento sostanziale (generazione e corruzione), cambiamento di dimensioni (crescita e diminuzione), cambiamento qualitativo (alterazione) e cambiamento di luogo (movimento locale). Il termine κίνησις può essere applicato solo agli ultimi tre tipi di cambiamento. κίνησις è quindi una specie di μεταβολή.

quando cioè l'oggetto in questione inizia a cambiare. Nelle righe seguenti, non si sofferma ulteriormente sull'inizio del cambiamento, ma si concentra sull'inizio temporale, fornendo una serie di argomenti per mostrare che esso non esiste. Probabilmente, data l'analogia di struttura che per Aristotele vi è tra tempo e movimento⁶², egli non ritenne necessario ripetere gli argomenti per entrambi: ciò che vale per uno vale anche per l'altro. Soffermiamoci quindi sull'inizio temporale, consapevoli che quanto sarà detto varrà anche per l'inizio del movimento.

L'espressione che Aristotele in questo passo usa per riferirsi a questa realtà temporale è ἐν ᾧ πρῶτον τοῦ χρόνου μετέβαλλεν («ciò, del tempo, in cui in primo luogo [qualcosa] cambiava») oppure l'equivalente ὅτε μεταβέβληκεν πρῶτον («quando in primo luogo [qualcosa] è cambiato») ⁶³. Queste espressioni temporali sono però ambigue. Aristotele stesso infatti segnala che questo tipo di espressione può indicare sia **(I)** quando qualcosa in primo luogo ha iniziato a cambiare (si riferisce quindi all'inizio temporale del cambiamento) sia **(F)** può indicare quando in primo luogo qualcosa ha finito di cambiare (si riferisce allora alla fine del cambiamento) ⁶⁴. La distinzione è rilevante, perché Aristotele ritiene, nel caso della fine del cambiamento, che esso esista ⁶⁵, mentre l'esistenza dell'inizio del cambiamento è negata.

Per quanto riguarda la fine del cambiamento **(F)**, per Aristotele è necessario che essa sia indivisibile (ἄτομον) ⁶⁶. Se infatti fosse divisibile, allora si individuerebbero al suo interno delle parti. L'oggetto allora finirebbe di cambiare in primo luogo non più nel tempo *t*, ma in una delle parti di *t*, così che ci sarà 'qualcosa prima del primo' (τι τοῦ πρώτου πρότερον, 236a4), il che è assurdo. Un qualsiasi tempo divisibile infatti porta con sé il problema di un regresso all'infinito. Per questo motivo, allora, la fine del cambiamento dovrà essere il punto finale del processo di mutamento, e sarà indivisibile in quanto suo limite (πέρας) ⁶⁷. Questa dimostrazione si basa quindi sull'importanza del termine πρῶτον: la specificazione che il cambiamento deve essere terminato in prima istanza in quella realtà temporale porta ad escludere un qualsiasi intervallo di tempo divisibile, perché ciò che è divisibile potrà sempre avere una parte che può essere detta 'prima' a maggior ragione ⁶⁸.

⁶² Cfr. su questo punto DUFOUR, *Commentaire cit.*, p. 93.

⁶³ AR., *Phys.*, VI, 5, 235b31.

⁶⁴ AR., *Phys.*, VI, 5, 236a7-10.

⁶⁵ AR., *Phys.*, VI, 5, 236a10-11.

⁶⁶ AR., *Phys.*, VI, 5, 235b32-33.

⁶⁷ AR., *Phys.*, VI, 5, 236a11-13.

⁶⁸ L'importanza di πρῶτον in questo capitolo aristotelico non è sfuggita agli interpreti. In particolare Morison (B. MORISON, *Le temps primaire du commencement d'un changement*, in J.-F. BALAUDÉ, F. WOLFF eds., *Aristote et la pensée du temps*, Université Paris X, Nanterre 2005, pp. 99-111) ha sottolineato che Aristotele, poco prima di questa dimostrazione, indica esplicitamente che

Consideriamo ora le ragioni per cui Aristotele afferma che l'inizio di un cambiamento non esiste **(I)**. Il filosofo procede eliminando i due possibili candidati. Esclude, in primo luogo, che possa trattarsi di un indivisibile temporale **(I.1)**. Se infatti si ammette che il tempo corrispondente all'inizio del movimento sia indivisibile, allora l'oggetto avrà iniziato a cambiare in quell'indivisibile, che sarà quindi inteso come parte del tempo in cui l'intero cambiamento ha luogo. Se un indivisibile è considerato come parte del tempo, allora il tempo del cambiamento risulterà composto da parti discrete, e il tempo non sarà più un continuo (conclusione che Aristotele non è disposto ad accettare)⁶⁹.

Esclude poi che possa trattarsi di un tempo divisibile **(I.2)**. La ragione è che, se l'inizio temporale di un movimento fosse divisibile, si individuerebbero al suo interno delle parti. L'oggetto cambierebbe quindi prima in una sua parte, e il tempo che era stato individuato come primo non sarà più primo⁷⁰. La forza di questa dimostrazione sta ancora una volta nel fatto che si sta parlando di $\pi\rho\acute{o}\tau\omicron\nu$. A causa della divisibilità all'infinito del tempo, non è possibile individuare una parte iniziale di movimento che sia davvero prima.

Una volta esclusi i due possibili candidati, Aristotele può allora concludere che 'ciò in cui in primo luogo [qualcosa] è cambiato', inteso come l'inizio temporale di un cambiamento, non esiste affatto.

4.1.2. I commentatori tardo-antichi sull'inizio del movimento in Aristotele

L'idea che il movimento fosse considerato da Aristotele come avente una fine, ma non un inizio ha portato più volte gli interpreti a parlare di asimmetria⁷¹. Il

cosa intende con $\pi\rho\acute{o}\tau\omicron\nu$: «intendo con *primo* ciò che è in un dato modo non per il fatto che lo è qualcos'altro da lui» (235b33-34). Facendo leva su questa precisazione, Morison ha sostenuto che $\pi\rho\acute{o}\tau\omicron\nu$ in questo contesto non vada inteso in senso temporale: si dovrebbe tradurre 'primairement' e non 'premièrement' (p. 101). A questo proposito, però, Pellegrin (P. PELLEGRIN, *Début et fin du mouvement et du repos. Remarques sur la communication de Benjamin Morison*, in *Aristote et la pensée du temps* cit., pp. 113-126) nota che quel $\pi\rho\acute{o}\tau\omicron\nu$ resta comunque una realtà temporale. È vero che la specificazione fornita qui da Aristotele avvicina il termine al significato di 'per sé', in contrapposizione a 'per altro'. Ma il fatto di interpretare $\pi\rho\acute{o}\tau\omicron\nu$ in senso essenziale (come 'per sé') non esclude — nota Pellegrin (pp. 116-117) — una sua proiezione sull'asse temporale: il tempo in cui primariamente ciò che è cambiato è cambiato è comunque il tempo in cui l'oggetto è cambiato per la prima volta.

⁶⁹ AR., *Phys.*, VI, 5, 236a16-17. L'argomento è riportato da Aristotele in modo molto sintetico. Seguo l'interpretazione che di questo passo dà Simplicio, in *Phys.*, pp. 984.30 - 985.8 (i passi del commento sono citati secondo l'edizione SIMPLICIUS, *In Aristotelis physicorum libros quattuor posteriores commentaria*, ed. H. DIELS, Reimer, Berlin 1895 [CAG X]).

⁷⁰ AR., *Phys.*, VI, 5, 236a20-27.

⁷¹ SORABJI, *Time, Creation and the Continuum* cit., p. 405; LETTINCK, *Aristotle's Physics* cit., p. 509; R. W. SHARPLES, *Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence. Commentary Volume 3.1. Sources on Physics*, Brill, Leiden 1998, pp. 79-80; MORISON, *Le temps primaire* cit., p. 110;

primo a segnalare la problematicità di questa concezione fu Teofrasto; scrisse infatti, a questo proposito, che è sorprendente l'idea che « del camminare ci sia una fine ma non un inizio, del salpare ci sia una fine ma non un inizio »⁷². La fonte per questa affermazione di Teofrasto sono i commenti alla *Fisica* di Aristotele di Temistio e Simplicio, i quali non solo menzionano l'aporia, ma riportano anche una risposta al problema⁷³. La soluzione consiste nello specificare che sia l'inizio (ἡ ἀρχή) sia la fine (τὸ πέρας) del cambiamento (e i loro corrispettivi temporali) possono essere intesi in due modi: o come una parte estesa (τὸ πρῶτον μέρος e τὸ ἔσχατον μέρος) o come un limite indivisibile (ἀρχή e πέρας)⁷⁴. L'inizio e la fine del movimento (ma anche del tempo), se intesi come parte, non esistono, perché non è possibile individuarli: non si può mai giungere a qualcosa che sia veramente primo o veramente ultimo a causa dell'infinita divisibilità delle parti di un continuo⁷⁵. Al contrario, l'inizio e la fine, intesi come limite indivisibile, esistono e possono essere identificati⁷⁶.

Secondo questa interpretazione, allora, quando Aristotele in *Fisica*, VI, 5 nega l'esistenza dell'inizio di un cambiamento, sta pensando in realtà solo alla prima parte; quando invece dice che la fine di un cambiamento esiste, sta pensando al limite finale⁷⁷. In questo modo, si può salvare Aristotele dall'accusa di negare

RASHED, *Alexandre d'Aphrodise* cit., pp. 105-106 ; F. PARACCHINI, *Raisons et déraison d'un étonnement millénaire : à propos de l'analyse aristotélicienne du changement dans Phys. Z 5*, in M. BONELLI, A. LONGO eds., "Quid est veritas?" : *Hommage à Jonathan Barnes*, Bibliopolis, Napoli 2010, pp. 87-114. Pellegrin parla di 'dottrina paradossale' in relazione a 'la fin sans commencement' del movimento aristotelico (PELLEGRIN, *Début et fin du mouvement* cit., p. 122).

⁷² Riportato in TEMIST., in *Phys.*, p. 195.10-11. Per il commento a questa testimonianza relativa a Teofrasto, si veda SHARPLES, *Theophrastus of Eresus* cit., pp. 79-82. L'aporia di Teofrasto è riportata anche da SIMPL., in *Phys.*, p. 986.5 e ss.

⁷³ Todd, in THEMISTIOS, *On Aristotle Physics 5-8*, tr. R. B. TODD, Duckworth, London 2008, pp. 120-121, n. 351, specifica che non si sa se Teofrasto stesso avesse fornito una soluzione simile all'aporia. Suggerisce inoltre la possibilità che Temistio e Simplicio avessero avuto come fonte Alessandro nella risposta al problema; cfr. gli scoli bizantini 357 e 358 editi da RASHED, *Alexandre d'Aphrodise* cit., pp. 384-385. Per quanto riguarda Filopono, la porzione del commento relativa a questo passo è conservata in arabo, sotto forma di sommario o parafrasi, nel ms. Leiden Or. 583 (BADAWI, *al-Ṭabī'a* cit., pp. 675.12 - 676.14); tuttavia, da quello che si evince da questo passo, Filopono non sembra considerare problematica la negazione dell'inizio del movimento da parte di Aristotele.

⁷⁴ SIMPL., in *Phys.*, p. 986.10-13; Temistio, a proposito dell'inizio temporale di un cambiamento, scrive che può essere inteso come un tempo esteso oppure come un istante (in *Phys.*, p. 194.22-23): αὕτη τοίνυν ἡ χρόνος ἐστὶν ἢ ἀρχὴ χρόνου καὶ οἶον τὸ νῦν.

⁷⁵ TEMIST., in *Phys.*, p. 194.23-25; SIMPL., in *Phys.*, p. 986.22-24.

⁷⁶ La soluzione prospettata dai commenti di Temistio e Simplicio riesce in questo modo a ristabilire la simmetria tra l'inizio e la fine del cambiamento. Cfr. TODD, *On Aristotle Physics 5-8* cit., pp. 120-121 n. 351: « Both texts accept the need for symmetry between an indivisible beginning and end of a change, while acknowledging that the divisibility of parts precludes the identification of a first or last change ».

⁷⁷ SIMPL., in *Phys.*, p. 986.27-31; TEMIST., in *Phys.*, p. 195.20-26.

in senso assoluto l'esistenza dell'inizio di un cambiamento. Il cambiamento può avere allora un inizio, ma deve essere inteso come un limite indivisibile che lo precede⁷⁸. Avrà quindi una natura differente da quella del cambiamento stesso, dal momento che non è parte del cambiamento pur precedendolo immediatamente. Questo significa che l'inizio del cambiamento, se inteso come limite, non può essere considerato esso stesso un cambiamento⁷⁹.

4.2. Valutazione dei tre candidati al ruolo di inizio del movimento

4.2.1. Il primo significato: il limite iniziale di un movimento

Alla luce del passo aristotelico sull'inizio del movimento e del dibattito che da esso ha preso le mosse nella tardo-antichità, è possibile capire meglio le valutazioni che Avicenna formula in merito ai possibili candidati al ruolo di inizio del movimento⁸⁰.

Per quanto riguarda il primo significato, esso è un limite⁸¹ e in quanto limite non ha estensione. Un movimento, tuttavia, si estende nel tempo e nello spazio⁸². Secondo Avicenna, quindi, l'inizio del movimento, inteso come limite, esiste (è questo l'unico senso in cui può essere inteso correttamente l'inizio del movimento), ma non è esso stesso un movimento. Questa posizione lo pone in continuità con l'interpretazione che i commentatori tardo-antichi hanno dato del passo aristotelico esaminato in precedenza.

⁷⁸ SIMPL., in *Phys.*, p. 986.24-27.

⁷⁹ Sia Temistio sia Simplicio a questo proposito riportano l'assioma secondo cui « l'inizio e ciò di cui è inizio non sono la stessa cosa », da cui concludono che l'inizio del cambiamento non è un cambiamento (οὐδὲ κίνησις ἡ ἀρχὴ τῆς κινήσεως, TEMIST., in *Phys.*, p. 195.19); cfr. anche SIMPL., in *Phys.*, p. 986.13-15.

⁸⁰ Per quanto riguarda la conoscenza da parte di Avicenna di alcuni commenti tardo-antichi alla *Fisica*, si veda J. JANSSENS, *L'Avicenne latin : un témoin (indirect) des commentateurs*, in R. BEYERS ET AL. éd., *Tradition et traduction. Les textes philosophiques et scientifiques au moyen âge*, Leuven University Press, Leuven 1999, pp. 89-105. La parafrasi alla *Fisica* di Aristotele di Temistio fu tradotta in arabo, ma la traduzione araba non è conservata (J. WATT, *Thémistios*, in R. GOULET éd., *Dictionnaire des philosophes antiques*, tome VI: de Sabinillus à Tyrsénos, CNRS Éditions, Paris 2016, p. 873), se si escludono alcune citazioni riportate nel ms. Leiden Or. 583. Per quanto riguarda Simplicio, invece, una traduzione araba del commento alla *Fisica* non è conosciuta; cfr. E. CODA, *Simplicius dans la tradition arabe*, in *Dictionnaire des philosophes antiques*, tome VI cit., p. 394. Per ulteriori informazioni sulla circolazione dei commenti tardo-antichi alla *Fisica* nel mondo arabo, si veda LETTINCK, *Aristotle's Physics* cit., pp. 4-6.

⁸¹ Av., *Samāʿ*, III 6, p. 205.1.

⁸² A questo proposito occorre ricordare che Avicenna in questo capitolo sta parlando del movimento inteso nel senso di 'percorrere una distanza'. In questa accezione il movimento non può avere uno svolgimento puntuale, istantaneo, perché si estende necessariamente da un punto di partenza a una fine, dove ha luogo il suo completamento.

Nelle righe in cui Avicenna afferma ciò, è introdotta anche la discussione in merito all'inizio del movimento inteso nel secondo significato:

T.2 Av., *Samāʿ*, III, 6, p. 205.1-2 (ed. Cairo):

فأول الحركة بمعنى الطرف ليس بحركة، فلا يكون للشيء بمعنى ذلك الأول أول ما يحرك، وأما بالوجه الثاني فيكون له أول ما يحرك، لكن أوليته وضعية عرضية لا حقيقية. L'inizio del movimento col significato di 'limite' non è un movimento, la cosa quindi non ha, col significato di questo inizio, أول ما يحرك. Per quanto riguarda il secondo modo, invece, la cosa ha أول ما يحرك, ma l'essere primo di quest'ultimo è assunto, accidentale e non reale.

In questo passo Avicenna usa un'espressione simile a quella incontrata nel passo T.1. Si tratta di أول ما يحرك, che ha una struttura analoga (con أول ما e un verbo di movimento) a quella vista in precedenza. Si differenzia tuttavia per il fatto che non vi compare il pronome suffisso che segue il verbo, e il soggetto non è esplicitato. Inoltre qui l'espressione è preceduta da له و للشيء. Questi ultimi indicano il mobile, come appare chiaro se si considerano le righe che precedono immediatamente T.2⁸³. Per quanto riguarda il verbo, invece, i manoscritti presentano varianti analoghe a quelle riscontrate in T.1.

Prima occorrenza:

أول ما يحرك	Or113, Top3261, Car1424, Be331, Bey3967, Aya2441, Mal1243
أول ما يحرك	Zāyid
أول ما يحرك	Da823
أول ما يحرك	litografia Teheran, Āl Yāsīn, McGinnis
ما يحرك	Da825, Ra3476
أول ما يحركه	Or84
أول ما تحرك	Poc125, Nur2710, Aya2442, Na248, Maj135, Su1748, Ba5353, Du5412, Or4
primum motum	Lat.

⁸³ Av., *Samāʿ*, III, 6, pp. 204.18 - 205.1: « Il mobile ha nel suo movimento un primo movimento, e quello è in potenza ed è ciò che è equivalente al movimento che è il più piccolo dei movimenti ».

Seconda occorrenza:

أول ما يحرك	Poc125, Or113, Da825, Top3261, Car1424, Be331, Bey3967, Aya2441, Na248, Ra3476, Mal1243
أول ما يحرك	Zāyid
أول ما يحرك	litografia Teheran, Da823, Āl Yāsīn, McGinnis
أول ما يحركه	Or84
أول ما تحرك	Nur2710, Aya2442, Maj135, Su1748, Ba5353, Du5412, Or4

primum motum

Lat.

Per tradurre l'espressione che compare in questo passo, occorre innanzitutto stabilire a che cosa essa si riferisce. **(A)** Una possibilità è che si riferisca alla prima parte del movimento. **(A.1)** Si potrebbe quindi intendere il verbo con significato intransitivo, nel senso di 'muoversi di un movimento', come si è visto per l'espressione in T.1. Tuttavia, in T.2 non è presente, in unione col verbo, un pronome suffisso che rimandi ad حركة. Per questo motivo, è probabile che l'espressione in questo passo sia da intendere in modo differente da come è intesa nel caso esaminato in precedenza.

(A.2) È possibile allora interpretare il verbo come una II forma attiva: 'la prima [parte del movimento] che muove'⁸⁴. Questa lettura è in linea con l'argomentazione generale di Avicenna, che sta valutando se l'inizio del movimento possa essere inteso o meno come prima parte del movimento. Intesa così, però, l'espressione sembra sintatticamente incompleta. In questo senso, la lezione di Or84, con l'aggiunta del pronome suffisso ه, che si riferisce a شيء (il mobile), sembra segnalare il tentativo da parte di un copista di un dare un complément oggetto al verbo di II forma.

(B) Vale la pena allora considerare la possibilità che questa espressione si riferisca alla prima parte del mobile. La presenza di للشيء e di له che precedono أول può legittimare tale interpretazione. Ciò può sembrare a prima vista sorprendente, dal momento che lo scopo di Avicenna in queste righe è valutare se i due significati siano candidati adeguati al ruolo di inizio del movimento. Come mai allora in questo contesto si dovrebbe chiamare in causa la prima parte dell'oggetto che si muove?

⁸⁴ Questa per esempio sembra essere l'interpretazione di McGinnis: « The first of the motions, in the sense of limit, is not a motion, and so *nothing can be the first motion* in that sense of first. *What moves can be first* in the second sense; however, its being first is hypothetical and accidental, not real » (McGINNIS, *Physics* cit., p. 314; corsivo mio).

Per rispondere a questa domanda è utile considerare di nuovo il testo di Aristotele, in particolare *Fisica*, VI, 5. Anche in Aristotele infatti si verifica uno 'slittamento' di questo tipo. All'inizio della trattazione dell'inizio del cambiamento, Aristotele aveva esordito negando la sua esistenza e quella di un tempo a esso corrispondente⁸⁵. A questa affermazione seguono gli argomenti che si sono visti, con cui Aristotele prova che non può esistere un primo tempo in cui l'oggetto è cambiato. Ci si aspetterebbe a questo punto la dimostrazione dell'inesistenza dell'ἀρχὴ μεταβολῆς, invece troviamo la dimostrazione che non esiste una prima cosa di ciò che cambia⁸⁶. Il ragionamento è analogo a quelli visti in precedenza: si considera un oggetto che cambia e si individua in questo una prima parte. Ma tale oggetto, in quanto grandezza, è infinitamente divisibile; si può procedere così all'infinito a dividerlo senza riuscire a individuare una prima parte in assoluto⁸⁷.

Il fatto che in Aristotele non compaia la dimostrazione che una prima parte del movimento non esiste non è problematico. Ha dimostrato infatti nel capitolo precedente (VI, 4) che tutto ciò che è relativo al movimento (tempo, distanza, mobile ecc.) è parimenti continuo e infinitamente divisibile; per questo motivo la dimostrazione che non esiste una prima parte del mobile può di fatto valere anche per la prima parte del movimento⁸⁸. Alla luce del confronto col testo di Aristotele, è legittimo allora pensare che anche nel passo di Avicenna capiti qualcosa di simile: un riferimento alla prima parte del mobile, invece che alla prima parte del movimento, non sarebbe fuori luogo in questo contesto⁸⁹.

Se si accoglie allora l'ipotesi che l'espressione in T.2 si riferisca alla prima parte del mobile, occorre riflettere sul modo di tradurre il verbo يَحْرُكُ. Si è visto che, anche nel caso di questo passo, la maggior parte dei testimoni reca il verbo senza punti. **(B.1)** Se lo si intende in senso transitivo, il verbo sarà da leggere come una II forma al passivo e si tradurrà con 'la prima cosa che è mossa'. Se lo si intende in senso intransitivo, **(B.2)** il verbo sarà alla I forma, col significato di 'la prima cosa che si muove', oppure **(B.3)** alla V forma al perfetto, nel senso di 'la prima cosa che si è mossa'.

Dal punto di vista del significato, tutte e tre le strade (B.1, B.2 e B.3) sono ugualmente percorribili. Tra esse tuttavia la II forma passiva sembra meno

⁸⁵ AR., *Phys.*, VI, 5, 236a14-15.

⁸⁶ AR., *Phys.*, VI, 5, 236a27-28: οὐδὲ δὴ τοῦ μεταβεβληκότος ἔστιν τι πρῶτον ὃ μεταβέβληκεν.

⁸⁷ AR., *Phys.*, VI, 5, 236a27-35.

⁸⁸ DUFOUT, *Commentaire* cit., pp. 97-98.

⁸⁹ Anche Avicenna infatti, al pari di Aristotele, istituisce una stretta corrispondenza, per quanto riguarda la divisibilità all'infinito, tra tutto ciò che è relativo al movimento, compreso il mobile. Cfr. Av., *Samāʿ*, III, 5, p. 198.4-5, dove parla in questo senso di *munāsabāt*, cioè 'corrispondenze', tra mobili, movimenti e intervalli di tempo.

probabile, perché in questo contesto non c'è alcun riferimento a un motore che muove l'oggetto; da questo punto di vista, la I e la V forma andrebbero meglio, perché pongono l'accento sull'azione stessa del mobile. La scelta tra la I e la V forma, invece, non può essere condotta sulla base del significato della forma verbale (entrambe significano 'muoversi'). Si può osservare però che un numero nutrito di codici riporta il verbo con *tā'* iniziale (da intendere qui come indicatrice di una V forma), mentre un solo testimone ha sicuramente il verbo con *yā'*. Il peso di questa osservazione è in parte mitigato dal fatto che — come si è detto — la maggioranza dei codici esaminati riporta il verbo senza punti, e per questo motivo non è possibile fare un bilancio sicuro di quale lezione sia più frequente. Resta comunque vero che la lezione con *tā'* iniziale è ben attestata e va quindi presa in seria considerazione.

In margine a queste osservazioni occorre notare che la traduzione latina rende l'espressione in questione con 'primum motum', che può significare 'primo movimento'. In questo caso la traduzione latina si accosterebbe al significato (A). Tuttavia, 'primum motum' non è incompatibile con l'interpretazione dell'espressione in riferimento al mobile (B). Il termine 'motum' infatti può essere usato anche per rendere l'arabo متحرك⁹⁰.

Prima di decidere come intendere il verbo in questa espressione, esaminiamo la valutazione che Avicenna formula in merito al secondo senso di inizio del movimento.

4.2.2. Il secondo significato: la parte iniziale di un movimento

Come già detto in precedenza, il passo appena discusso a livello testuale (T.2) contiene anche l'analisi cui Avicenna sottopone il secondo candidato per l'inizio del movimento, cioè la prima parte del movimento stesso. Tale significato è scartato; la ragione è che l'essere primo, di tale movimento e di ciò che si muove con esso, è « assunto, accidentale e non reale »⁹¹. Se ripensiamo alla concezione avicenniana del continuo, ne capiamo la ragione: le parti all'interno di una grandezza continua possono essere portate all'atto solo tramite un'operazione mentale di supposizione dei limiti che le dividono. Una volta però che la supposizione venga meno, anche la divisione delle parti non esisterà più. Per questo motivo, anche se è possibile individuare all'interno del continuo una prima parte, questa vi esisterà come separata dalle altre parti solo

⁹⁰ Cfr. per esempio Av., *Samā'*, III, 6, p. 207.10-11: كل متحرك بذاته وكل متغير التغيرات الجسمانية... La resa della traduzione latina è la seguente: « omne *motum* essentialiter et omne quod mutatur mutationibus corporalibus per suam essentiam... ».

⁹¹ Av., *Samā'*, III, 6, p. 205.2.

finché è immaginata come tale. Non ha senso allora parlare di una prima parte del movimento né di una prima parte del mobile.

In questa valutazione, Avicenna si discosta in parte dall'approccio adottato dai commentatori tardo-antichi. Questi ultimi seguono più da vicino il testo aristotelico: insistono sul fatto che di ciò che è continuo non è possibile individuare una prima parte per via della sua divisibilità all'infinito. Avicenna invece insiste maggiormente sullo statuto che questa prima parte avrebbe all'interno della grandezza continua: non sarebbe propriamente reale, perché frutto solo di un'attività mentale.

4.2.3. Il terzo significato: un *minimum* di movimento

Avicenna prende poi in esame il terzo modo in cui può essere inteso l'inizio del movimento, cioè come corrispondente a un *minimum* del movimento⁹². Avicenna non entra qui nel merito della questione se esista o meno la più piccola parte del movimento, ma considera se essa, date le caratteristiche che le sono proprie per definizione, può svolgere adeguatamente il ruolo di prima parte del movimento. La conclusione a cui giunge è che ciò non è possibile. La ragione è che la prima parte di un movimento è, prima di tutto, una parte di un continuo. Come si è visto nel paragrafo 2, la parte del continuo ha determinate proprietà: esiste per accidente, nel momento in cui la supposizione ne definisce i limiti, e, col venire meno di questa, anch'essa viene meno come entità distinta. Inoltre ogni parte di un continuo è essa stessa continua, cioè a sua volta divisibile in continui.

Se si considera la prima proprietà, quella che riguarda lo statuto delle parti all'interno del continuo, si capisce perché Avicenna non consideri il più piccolo movimento come una parte all'interno di un movimento continuo. Il più piccolo movimento che esista, infatti, a differenza di una parte nel continuo, è qualcosa che può esistere in sé e per sé, la sua esistenza in atto non dipende da un'attività mentale di divisione. Essa ha un inizio e una fine in atto, mentre le parti del continuo hanno limiti definiti soltanto per supposizione⁹³. Inoltre, se il *minimum* del movimento fosse concepito come parte del continuo, sarebbe allora la più piccola parte possibile del continuo. In questo modo ci sarebbe una parte del continuo che non è ulteriormente divisibile, non soggetta quindi alla divisione che conserva la continuità⁹⁴. Ciò sarebbe in contraddizione con quanto Avicenna ha sostenuto all'inizio del capitolo, cioè che il movimento, alla pari della distanza e del tempo, è divisibile all'infinito. Siccome il *minimum* del movimento, così

⁹² Av., *Samāʿ*, III, 6, p. 205.3 e ss.

⁹³ Av., *Samāʿ*, III, 6, p. 205.3-6.

⁹⁴ Av., *Samāʿ*, III, 6, p. 206.4-6.

come è inteso, non può godere delle proprietà che caratterizzano le parti di un continuo, non potrà essere la prima parte di un movimento.

Una volta chiarite le ragioni per cui Avicenna esclude anche il terzo significato come inizio del movimento, possiamo considerare più da vicino il passo in cui le espone:

T.3 Av., *Samāʿ*, III, 6, p. 206.4-6:

فلو كان في جملة تلك الحركة حركة هي أول
ما يحركها الشيء، وكانت بمعنى أنه جزء من
المتصل لا جزء في المتصل أصغر منه، لم يكن
يعرض لذلك الجزء من الحركة الانقسام الذي لا
يبطل الاتصال الذي كلامنا فيه

Pertanto se in quel movimento totale ci fosse un movimento che è أول ما يحركها الشيء, e [lo] fosse nel senso di ‘parte del continuo’ — continuo nel quale non c’è parte più piccola —, non [potrebbe] capitare a quella parte del movimento la divisione che non compromette la continuità della quale abbiamo parlato.

In questo passo compare nuovamente l’espressione con أول ما e il verbo di movimento, col soggetto espresso e il pronome suffisso unito al verbo. Il soggetto è الشيء che, analogamente alla traduzione latina, proporrei di interpretare come il ‘mobile’⁹⁵. Il pronome suffisso ها rimanda a ‘movimento’, حركة. Nella struttura, quindi, la presente espressione rispecchia quella trovata in T.1 e, come in T.1, si riferisce alla prima parte del movimento. Per quanto riguarda poi nello specifico il verbo, troviamo nella tradizione manoscritta di questo passo una situazione simile a quelle riscontrate in precedenza:

أول ما يحركها الشيء	Or113, Da825, Aya2442, Top3261, Car1424, Be331, Bey3967, Aya2441, Na248, Ra3476, Mal1243
أول ما يحركها الشيء	Or84, Zāyid, Āl Yāsīn, McGinnis
أول ما يحركها الشيء	Da823, Ba5353, litografia Teheran
أول ما تحركها الشيء	Poc125, Nur2710, Maj135, Su1748, Du5412, Or4
primus quare moveretur mobile	Lat.

⁹⁵ Cfr. il passo T.1 dove il soggetto all’interno dell’espressione era المتحرك. Nell’intendere الشيء come ‘mobile’ mi allontano dall’interpretazione di McGinnis che traduce: « So, if, in the totality of that motion, some motion were the first that something produces... » (McGINNIS, *Physics* cit., p. 316; corsivo mio); sembra infatti intendere الشيء come qualcosa che genera il movimento.

La maggior parte dei testimoni reca il verbo senza punti sulla prima lettera. Si presentano pertanto le possibilità di interpretazione del verbo già prospettate per il passo T.1. L'interpretazione del verbo inteso alla II forma attiva **(a)** è meno probabile per le ragioni che si sono dette nel paragrafo 4. È preferibile allora intendere il verbo in senso intransitivo **(b)**, nel significato di 'muoversi di un movimento'. La traduzione latina stessa, data la presenza di *moveretur*, sembra intenderlo in questo modo. Il verbo può essere allora letto come una I forma all'imperfetto **(b.1)** o come una V forma al perfetto **(b.2)**.

5. INTERPRETAZIONE DELLE ESPRESSIONI CON *AWWAL MĀ*

Ora che si ha una visione d'insieme della discussione di Avicenna sulla questione dell'inizio del movimento, si possono considerare complessivamente le espressioni che si trovano nei passi T.1, T.2 e T.3. È possibile ripartire le espressioni incontrate in due gruppi, sulla base delle reciproche somiglianze:

Gruppo 1		Gruppo 2	
T.1	فمحال أن يكون للحركة شيء هو أول ما يحركه المتحرك	T.2	فلا يكون للشيء بمعنى ذلك الأول أول ما يحرك
T.3	فلو كان في جملة تلك الحركة حركة هي أول ما يحركها الشيء		وأما بالوجه الثاني فيكون له أول ما يحرك

Le espressioni del gruppo 1 sono simili, perché entrambe si riferiscono a una prima parte del movimento (come si evince dal contesto di T.1 e T.3). In entrambi i casi, il soggetto dell'espressione è il mobile: nel primo caso è esplicitamente المتحرك, mentre nel secondo caso è menzionato come الشيء. In unione al verbo compare poi un pronome suffisso (nel primo caso ه, nel secondo ها), che rimanda a حركة o a un termine a esso riferito. Per quanto riguarda il verbo, resta ancora aperta la scelta tra la I e la V forma. Non si può usare come discriminante il significato proprio della forma verbale, perché entrambe indicano l'azione di 'muoversi'. Ciò che distingue l'una dall'altra è però il valore temporale.

Se si considera la scelta da questo punto di vista, allora la V forma al perfetto **(b.2)** sembra preferibile. Come già sottolineato, in questo capitolo la nozione di movimento che Avicenna ha in mente è quella del movimento nel senso

di 'percorrere una distanza'⁹⁶. Il movimento, in questo senso, si realizza al passato⁹⁷, perché viene concepito a posteriori, come una realtà continua che si estende dall'inizio del movimento fino alla fine. La sua realizzazione avviene quando la distanza è già stata percorsa; a quel punto è possibile ricostruire mentalmente tutte le posizioni che il mobile ha assunto nell'effettuare quel movimento e immaginarle formare una realtà continua. A mio avviso questo discorso può essere proiettato nel contesto dei passi T.1 e T.3, dove Avicenna sta negando che possa esistere una prima parte del movimento. Tale prima parte è concepita come una realtà estesa con cui il mobile ha percorso la prima parte della distanza. Quando si fa riferimento a quel primo movimento, si sta quindi pensando al mobile che ha già percorso una certa porzione del suo tragitto. La prima parte del movimento sarebbe così concepita come un movimento (parziale) che ha terminato di percorrere la prima parte della distanza.

A queste considerazioni a favore della V forma del verbo, si aggiunge il fatto che essa è attestata da un buon numero di manoscritti antichi, soprattutto per quanto riguarda il passo T.3. Le espressioni nei passi T.1 e T.3 si potranno allora leggere come أول ما تحركه المتحرك / أول ما تحركها الشيء, intese come 'la prima [parte di movimento] di cui si è mosso il mobile'.

Il caso delle espressioni del gruppo 2 è più delicato. Si è detto che le interpretazioni che leggono anche in questa espressione un riferimento alla prima parte del movimento (A) sono possibili, ma l'assenza del pronome suffisso in unione col verbo le rende meno probabili. Si è quindi presa in considerazione l'ipotesi (B), secondo cui l'espressione أول ما يحرك indicherebbe la prima parte del mobile soggetta a movimento. Questo tipo di interpretazione può essere supportata anche dal fatto che, mentre nelle espressioni del gruppo 1 si fa riferimento a qualcosa che è nel movimento (للحركة / في الحركة), in quelle del gruppo 2 si parla di qualcosa che appartiene al mobile (للشيء / له).

La presenza di un riferimento alla prima parte del mobile, in un contesto di questo tipo, trova un parallelo — come si è visto — nel testo di Aristotele stesso (*Fisica*, VI, 5). È interessante a questo punto vedere come i passi più significativi a questo proposito furono tradotti in arabo. Questo è il passo con cui Aristotele inaugura la sua trattazione dell'inizio del movimento:

⁹⁶ Si tratta del 'movimento 1', secondo la denominazione fornita da HASNAWI, *La définition du mouvement* cit., pp. 228 e ss.; cfr. a questo proposito la nota 23 *supra*.

⁹⁷ HASNAWI, *La définition du mouvement* cit., p. 234: « Son mode d'existence est celui des choses au passé ». Cfr. per esempio Av., *Samā'*, IV, 4, p. 272.5-6 (وأما الحركة التي بمعنى القطع فإنها لا تحصل) (حركة و قطعاً إلا في زمان ماض).

AR., *Phys.*, VI, 5, 236a14-15 (p. 674.11-12 Badawī):

وذلك أنه ليس يكون للتغير مبداءً، ولا يكون من الزمان أول ما فيه تغير للشيء. οὐ γὰρ ἔστιν ἀρχὴ μεταβολῆς, οὐδ' ἐν ᾧ πρῶτον τοῦ χρόνου μετέβαλλεν («Non esiste infatti un inizio di un cambiamento né, per quanto riguarda il tempo, ciò in cui in primo luogo [qualcosa] cambiava »).

Aristotele afferma due cose: da un lato che l'inizio del cambiamento non esiste, dall'altro che neppure l'inizio temporale di quel cambiamento esiste. Dimostra subito dopo che un primo tempo del cambiamento non esiste. Tuttavia, quando è il momento di dimostrare che neppure l'inizio stesso del cambiamento esiste, in modo inaspettato, Aristotele fornisce una prova della non-esistenza di una prima parte dell'oggetto che cambia:

AR., *Phys.*, VI, 5, 236a27-35 (pp. 677.19 - 678.5 Badawī):

ولا من الشيء الذي قد تغير يكون شيء ما هو أول ما تغير. [...] إذن ألا يكون من المتغير شيء أصلاً هو أول ما تغير. οὐδὲ δὴ τοῦ μεταβεβληκóτος ἔστιν πρῶτον ὃ μεταβέβληκεν. [...] ὥστ' οὐθὲν ἔσται πρῶτον τοῦ...μεταβάλλοντος ὃ μεταβέβληκεν («né dunque, di ciò che è cambiato, esiste un qualcosa di primo che è cambiato. [...] Dunque di ciò che cambia non esisterà nulla che sia cambiato per primo »).

In questo passo il traduttore arabo, per esprimere questo concetto, si serve di un'espressione simile a quella che troviamo nel passo T.2 di Avicenna: si tratta sempre di ما أول seguito da un verbo di cambiamento/movimento. In questo caso non ci sono dubbi sul fatto che il verbo تغير debba essere letto come una V forma al perfetto, dal momento che traduce il verbo greco μεταβέβληκεν.

Non sappiamo in quale traduzione araba Avicenna leggesse la *Fisica* di Aristotele e non si può quindi affermare con certezza che egli avesse in mente il passo aristotelico secondo questa precisa formulazione. Tuttavia il passo della traduzione araba sopra citato costituisce, in un contesto pertinente, un parallelo per l'uso dell'espressione ما أول con un verbo alla V forma, nel significato di prima parte del mobile.

In questo contesto possono valere inoltre le medesime riflessioni espresse in precedenza a favore della scelta del tempo verbale al perfetto. Queste considerazioni, unite al parallelo aristotelico, mostrano che leggere il verbo in V forma (**B.3**) anche in T.2, così come è riportato del resto da un buon numero di

codici antichi, è un'interpretazione difendibile sia dal punto di vista dottrinale sia dal punto di vista testuale. L'espressione sarebbe dunque أول ما تحرك, 'la prima [parte del mobile] che si è mossa'.

6. CONCLUSIONI

L'analisi delle espressioni che compaiono nei passi T.1, T.2 e T.3, grazie all'esame dei più antichi codici arabi e della traduzione latina, ha consentito di chiarire alcuni aspetti della concezione di Avicenna sull'inizio di un movimento. Si è visto in particolare come Avicenna si serva di queste espressioni nei passi in cui rifiuta la possibilità che l'inizio del movimento sia inteso come prima parte. Il movimento infatti è continuo e infinitamente divisibile. Pertanto, alla pari delle grandezze fisiche che gli corrispondono (distanza, tempo, mobile), non può avere una parte che sia veramente prima. In queste valutazioni Avicenna segue da vicino la presentazione della questione che Aristotele fornisce in *Phys.*, VI, 5.

Da quest'ultimo, però, si discosta nel fatto che non nega l'esistenza dell'inizio del movimento in senso assoluto. Nega solo l'esistenza di un inizio esteso del movimento, non del suo limite iniziale, indivisibile. Da questo punto di vista, Avicenna si inserisce nel filone di interpretazione dei commentatori tardo-antichi, che avevano affrontato in modo analogo il problema — sollevato dal testo aristotelico — di un movimento che finisce ma non inizia. Il movimento ha dunque un inizio puntuale, ma esso non sarà un movimento. Questa è una precisazione importante, che consente, per esempio, di evitare il problema presentato in apertura dell'articolo: nel caso del passaggio da uno stato di quiete a uno di moto, il rischio è che il mobile, nell'istante che discrimina i due stati, sia considerato contemporaneamente in moto e in quiete. Se però l'inizio puntuale del movimento, non è movimento, il problema non si pone.

Avicenna si differenzia poi sia dal resoconto aristotelico sia dall'approccio dei commentatori nel momento in cui, affrontando queste tematiche, non insiste soltanto sulla divisibilità all'infinito di ciò che è continuo, ma anche sullo statuto delle parti all'interno del continuo stesso. Queste ultime infatti non sono propriamente reali, esistono solo per un atto di supposizione. È questo il motivo principale per cui una prima parte o un *minimum* secondo Avicenna non potranno svolgere il ruolo di inizio all'interno di un movimento continuo.

APPENDICE

Traduzione. *Fisica*, III, 6⁹⁸

/p. 203/ Sulle corrispondenze tra le distanze, i movimenti e gli intervalli di tempo relativamente a questa disposizione⁹⁹, ed è chiaro che nessuno di questi ha una prima parte

[§1 - *Il movimento è divisibile secondo la divisione della distanza*]

/5/ Diciamo ora che, se la distanza è divisibile all'infinito in potenza, allo stesso modo bisogna che il movimento, nel significato di percorrere [una distanza], sia divisibile all'infinito in potenza insieme con essa. Se un movimento non fosse divisibile in parti, la sua distanza sarebbe o non divisibile (e questo è impossibile) o divisibile in parti. Se [la distanza] fosse divisibile in parti, sarebbe, dal suo principio fino al luogo della divisione, minore che dal suo principio fino alla sua fine; ma non c'è 'minore' in ciò che non è divisibile in parti, e con ciò quel movimento¹⁰⁰ sarebbe una parte del movimento che percorre la distanza completa.

[§2 - *Il movimento è divisibile secondo la divisione della distanza e del tempo*]

E se il movimento è divisibile, [anche] il tempo parallelo ad esso sarà divisibile, anzi, piuttosto è il movimento a essere divisibile a causa della divisione della distanza o del tempo. Esistono un movimento veloce e uno lento, e a partire da questi **/10/** chiariremo che ognuno di quelli¹⁰¹ è divisibile; è necessario infatti che il [movimento] lento percorra una [distanza] minore della distanza che un movimento veloce percorre in un certo tempo, pertanto la distanza risulta divisibile. Il movimento veloce percorre quello [spazio] minore in un tempo minore, pertanto [anche] il tempo risulta divisibile. [...]

[§3 - *Il movimento non ha una prima parte*]

/p. 204.5/ Poiché ogni movimento e ogni cambiamento sono in un tempo che è divisibile all'infinito, è impossibile che il movimento abbia qualcosa che sia la prima [parte di movimento] di cui si è mosso il mobile¹⁰². Questo perché, se ci fosse un movimento che è un primo movimento, esso senza dubbio sarebbe in una distanza, e quella distanza è divisibile in potenza. Se [la distanza] è divisibile, una delle sue due parti è anteriore e l'altra posteriore; pertanto il movimento nella prima parte [delle due] sarebbe un primo movimento, ma era già stato considerato questo come primo movimento, e questa è una contraddizione.

⁹⁸ Per la traduzione dei passi seguo il testo dell'edizione IBN SĪNĀ, *al-Šifā'*, *al-Ṭabī'īyyāt*, 1. *al-Samā' al-ṭabī'ī*, ed. S. ZĀYID, Cairo 1983, tranne dove indicato diversamente.

⁹⁹ I. e. l'infinita divisibilità.

¹⁰⁰ I. e. il movimento corrispondente alla parte della distanza complessiva.

¹⁰¹ I. e. la distanza, il tempo e il movimento.

¹⁰² Per l'interpretazione di questa espressione, cfr. *supra*, paragrafo 5.

[§3.1 - *I tre candidati a ricoprire il ruolo di inizio del movimento*]

Ma l'inizio nel movimento e nel cambiamento [si può] intendere soltanto secondo uno di tre modi: [(1)] /10/ uno di questi è l'inizio nel senso del limite, cioè quello che è analogo a ciò che è l'inizio della distanza e il suo limite¹⁰³ e a ciò che è l'inizio del tempo corrispondente a quel movimento e il suo limite; ebbene questo è un inizio. [(2)] 'Inizio' [è inteso anche] in un secondo modo¹⁰⁴, cioè, quando capita al movimento una divisione in atto o per supposizione, la parte anteriore è la prima delle parti del movimento in atto. [(3)] Si potrebbe [poi] pensare che il movimento abbia un inizio in un altro modo, cioè alcuni di loro dissero che questi corpi, anche se sono divisibili all'infinito in potenza, non sono divisibili [continuando] a conservare le loro forme e le loro caratteristiche diverse da quella della quantità; il corpo infatti arriva a un limite, /15/ oltre il quale, se fosse diviso, non è vero che continuerebbe a essere acqua o aria o fuoco. Dissero [oltre a questi]: o mobile o distanza. Se la distanza in quanto distanza ha un limite — secondo loro — che essa non oltrepassa in piccolezza, [anche] il movimento avrà un limite che esiste come il più piccolo dei movimenti. Non esiste pertanto un movimento singolo più piccolo di esso, anche se è possibile immaginare ciò che è più piccolo di esso, cioè la sua metà o una sua parte, dal momento che quello è divisibile in sé in potenza, ma quell'essere divisibile in parti non viene fuori all'atto affatto nel senso delle singole parti e della separazione (ma parleremo di questo dopo). Pertanto, se le cose stanno così, il mobile ha nel suo movimento un primo movimento e quello è in potenza, ed è ciò che è equivalente al movimento che è il più piccolo /p. 205/ dei movimenti.

[§3.2 - *Valutazione dei tre sensi di inizio del movimento*]

L'inizio del movimento col significato di 'limite' [(1)] non è un movimento, la cosa quindi non ha, col significato di questo inizio, una prima [parte] che si è mossa¹⁰⁵. Per quanto riguarda il secondo modo [(2)], invece, la cosa ha la prima [parte] che si è mossa¹⁰⁶, ma l'essere primo di quest'ultima è assunto, accidentale e non reale. Per quanto riguarda il terzo modo [(3)], anche se fosse vero che il movimento ha qualcosa che è il più piccolo movimento che possa esistere, sarebbe vero soltanto in quanto è un movimento in sé distinto con un principio e una fine in atto, non in quanto è l'inizio del movimento totale di cui quell'inizio sarebbe una porzione, /5/ dopo la quale il [movimento] totale continua. Infatti questa ripartizione, su cui [verte] il nostro discorso, [ha luogo] per supposizione, mentre quell'unità non divisibile appartenente al movimento, non è secondo la supposizione, ma secondo l'esistenza. [...] /p. 206.3/ Per quanto riguarda [l'ipotesi che esista] nel continuo, non esiste una prima parte con questa proprietà, perché non esiste in esso un movimento distinto staccato in sé, ma le parti di quel movimento sono continue le une con le altre. Pertanto se in quel movimento totale ci fosse un movimento

¹⁰³ Leggendo qui come segno di interpunzione una virgola, come stampa ĀL YĀSĪN, *al-Samā'* cit., p. 207.27.

¹⁰⁴ Leggendo بمعنى come stampa ĀL YĀSĪN, *al-Samā'* cit., p. 207.28.

¹⁰⁵ Per l'interpretazione di questa espressione, cfr. *supra*, paragrafo 5.

¹⁰⁶ Per l'interpretazione di questa espressione, cfr. *supra*, paragrafo 5.

che è la prima [parte di movimento] di cui si è mossa la cosa¹⁰⁷, e [lo] fosse nel senso /5/ di 'parte del continuo' — continuo nel quale non c'è parte più piccola —, non [potrebbe] capitare a quella parte del movimento la divisione che non compromette la continuità della quale abbiamo parlato, dato che abbiamo postulato che la divisione dell'intero movimento in questa prima [parte] è una divisione che non compromette la continuità. Se questa parte del movimento non fosse suscettibile di questa specie di divisione, non ci sarebbe nell'inizio del movimento alcuna estensibilità, e dunque non sarebbe affatto lungo una distanza, quindi non sarebbe un movimento. E se il movimento è divisibile secondo la divisione che conserva la continuità all'infinito, tutto ciò che hai considerato primo, secondo il significato di 'parte', non secondo il significato di 'limite', ha un altro inizio in potenza.

¹⁰⁷ Per l'interpretazione di questa espressione, cfr. *supra*, paragrafo 5.

ABSTRACT

The Beginning of a Motion in the Physics of the Continuum: Avicenna reads Aristotle (Book of the Healing, Physics, III, 6)

In Book VI of *Physics*, Aristotle states that every motion has an end, but not a beginning. The problem of how to consider the beginning of a motion emerges when motion, inasmuch as it is a continuum, is considered infinitely divisible. Avicenna deals with this problem in Book III, Chapter 6 of the *Physics* in *The Book of the Healing*. The aim of the present article is to clarify the most significant passages of this chapter from a doctrinal as well as a textual point of view. We will show how Avicenna addresses the problem by adopting the strategy of a terminological disambiguation of what is meant by 'beginning'. In this sense, his account is inserted in the tradition of late-antique commentaries on Aristotle, but with some interesting differences. To achieve our aim, we have examined the most ancient witnesses of the manuscript tradition of Avicenna's *Physics*, many of which are not considered in the previous editions, as well as the Medieval Latin translation, which makes it possible to trace back to an ancient phase of the transmission of the text.

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CRISTINA CERAMI

The *De Caelo et Mundo* of Avicenna's *Kitāb al-Šifā'*: An Overview of its Structure, its Goal and its Polemical Background*

INTRODUCTION

If one can affirm without hesitation that cosmology is one of the most studied areas of Avicenna's philosophy, the part of the *Šifā'* corresponding to the *De Caelo* or, following the Arabic tradition, the *De Caelo et Mundo* (*al-Samā' wa-l-ālam*), remains to this day one of the least explored. Actually, with a few exceptions¹, the great majority of studies dealing with Avicenna's cosmological doctrines focuses on what one might call the 'celestial psychology' and relies primarily on the *Metaphysics* and on the *De Anima* of the *Šifā'*, rather than on the *De Caelo et Mundo* (hereafter *DCM*)². Furthermore, the very few articles delving into this part of the *Šifā'* take into account the chapters more strictly devoted to the study of the celestial world, rather than the treatise as a whole. As we will see, however, this part of the treatise in itself is not representative of the entire project conveyed by this section of Avicenna's philosophical summa.

* In writing this article, I benefited from Ahmad Hasnaoui's new insights on the *De Caelo et Mundo* of the *Šifā'*. I warmly thank him for having shared the unpublished results of his research with me. I also wish to thank Marwan Rashed for his advices and remark on a first version of this article and the two anonymous readers for their comments and suggestions. I am finally pleased to thank Michael Chase for his remarks on the style and the content of the article.

¹ A. GODDU, *Avicenna, Avempace and Averroes – Arabic sources of 'mutual attraction' and their influences on medieval and modern concept of attraction and gravitation*, in A. ZIMMERMANN, I. CRÄMER-RÜGENBERG eds., *Orientalische Kultur und europäisches Mittelalter*, *Miscellanea Medievalia*, 17, 1985, pp. 218-239; M. RASHED, *The Problem of the Composition of the Heavens (529-1610): A New Fragment of Philoponus and its Readers*, in P. ADAMSON, H. BALTUSSEN, P. STONE eds., *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, *Bulletin of the Institute of Classical Studies*, suppl. vol. 83, 2004, p. 35-56 (for a new French version, see *Id.*, *Le problème de la composition du ciel (529-1610): Un nouveau fragment de Philopon et ses lecteurs*, in *Id.*, *L'héritage aristotélicien. Textes inédits de l'Antiquité*, Nouvelle édition revue et augmentée, Les Belles Lettres, Paris 2016, pp. 649-689).

² For two recent examples of this general trend, see D. JANOS, *Moving the orbs: Astronomy, physics, and metaphysics, and the problem of celestial motion according to Ibn Sīnā*, « *Arabic Sciences and Philosophy* », 21/2, 2011, pp. 165-214; D. TWETTEN, *Aristotelian Cosmology and Causality in Classical Arabic Philosophy*, in D. JANOS ed., *Ideas in Motion in Baghdad and Beyond: Philosophical and Theological Exchanges between Christians and Muslims in the Third/Ninth and Fourth/Tenth Centuries*, Brill, Leiden - Boston 2016, pp. 312-434.

As in the rest of the *Šifā'*, the *DCM* is neither a commentary on nor a paraphrase of Aristotle's *De Caelo* (hereafter *DC*)³. Although Aristotle remains one of Avicenna's primary interlocutors, the Stagirite's text is deeply transformed in its doctrine as well as in its structure. The aim of the present study is to provide an overview of this transformation by framing the text within a broader philosophical and historical context. Although the debate concerning Avicenna's direct sources is still open, this contextualization will shed light on his general project. For I would like to suggest that the way in which Avicenna arranges his own *DCM* can be understood as an answer to the difficulties concerning the structure and the content of the Aristotelian treatise raised by his Greek and Arabic readers.

In what follows, I will first assess Avicenna's project by reading it against the background of the earlier Greek and Arabic tradition. Against this background, I will sketch the overall plan of the treatise and compare it with Aristotle's text. Then, by a closer study of the first chapters of the original *DCM*, I will argue that this work, without being a standard treatise of cosmology, continues the project of the *Physics* of the *Šifā'* (i.e. *al-Samā' al-Ṭabī'ī*) and must be seen as a study of the five simple bodies that constitute the universe as a whole⁴. In this same context, I will conclude that in the wake of al-Fārābī's rejection of Philoponus' criticisms against Aristotle, Avicenna's investigation aims ultimately at rebuking a neo-Philoponian trend among his Arabic contemporaries.

Afterwards, in a first appendix, I will examine in more detail the treatise wrongly transmitted as Avicenna's own *DCM* as part of the earliest Latin translation of his *Kitāb al-Šifā'*. This comparison will allow us to better appreciate the originality of Avicenna's treatise. Finally, in a second appendix, I will take into account the Latin translation of the authentic *DCM* and highlight some of its peculiarities. A survey of the chapters devoted to the sublunary simple bodies will enable us to confirm some of the hypotheses already put forward by specialists, and to draw some tentative conclusions which will need confirmation by a further study of the Arabic manuscript tradition.

³ Unless otherwise specified, I rely on the text edited in IBN-SINĀ, *Al-Šifā'*, *al-Ṭabī'īyyāt*, *al-Samā' wa-l-'ālam*, *al-Kawn wa-l-fasād*, *al-Af'āl wa-l-infi'ālāt*, ed. M. QĀSIM, Dār al-kitāb al-'arabī li-l-ṭibā'a wa-l-naṣr, Cairo 1969. All translations provided in the following pages are mine.

⁴ I hasten to say that, in defending this hypothesis, I do not want to advocate that the study of the sublunary world in the *DCM* does not concern the heavens and the superlunary world. I merely want to suggest that one cannot properly appreciate Avicenna's cosmology without considering it as a part of a larger and uniform study of the natural body. In this sense, the question pertaining the impact of the study of the sublunary world on Avicenna's celestial kinematics and on his metaphysics exceeds the limits of the present research.

I. BETWEEN ARISTOTLE AND AVICENNA: THE HISTORICAL AND PHILOSOPHICAL BACKGROUND OF THE *DE CAELO ET MUNDO* OF THE *ŠIFĀ'*

I.1 An overview of the Arabic reception of Aristotle's *De Caelo* and of its commentaries

From the beginning of the Abbasid empire and throughout the centuries, Aristotle's *DC* and the issues it tackles were the object of a wide-ranging debate that went beyond both the Muslim and Christian circles of *falāsifa*⁵. In fact, Aristotle's treatise and its commentaries are among the first Greek scientific and philosophical works to have been translated into Arabic.

Concerning Aristotle's texts, in the *Kitāb al-Fihrist* Ibn al-Nadīm informs us about the translations carried out down to the 10th century⁶. He reports that the *DC* was translated once at the turn of the 8th century, then revised during the 9th century and again partially translated during the 10th century⁷. A more complicated state of affairs is attested by the manuscript tradition, which bears witness to a third translation, probably realized during the 11th century⁸.

With regard to the circulation of the Greek commentaries, and more generally

⁵ For a study of the *DC*'s Arabic tradition, see G. ENDRESS, *Die arabischen Übersetzungen von Aristoteles' Schrift De Caelo*, Diss. Frankfurt am Main 1966; Id., *Die arabischen Übersetzungen von Aristoteles' Schrift De Caelo*, in P. L. SCHOONHEIM ed., *Symposium Graeco-Arabicum I. The transmission of Greek texts in Medieval Islam and the West*, N. Brockmeyer, Bochum 1986, pp. 5-6; Id. Averroes' *De Caelo. Ibn Rushd's Cosmology in his Commentaries on Aristotle's On the Heavens*, « Arabic Sciences and Philosophy », 5, 1995, pp. 9-49: pp. 47-48; see also the overview provided by H. HUGONNARD-ROCHE, *Aristote De Stagire: De Caelo. Tradition Syriaque et Arabe*, in R. GOULET ed., *Dictionnaire des philosophes antiques*. Supplément I, CNRS Éditions, Paris 2000, pp. 283-294.

⁶ AL-NADĪM, *Kitāb al-Fihrist*, mit Anmerkungen herausgegeben von G. FLÜGEL, nach dessen Tode besorgt von J. ROEDIGER und A. MÜLLER, 2 vols., Vogel, Leipzig 1871-2; pp. 250-251. English transl. in AL-NADĪM, *The Fihrist of al-Nadīm. A Tenth-Century Survey of Muslim Culture*, Translated by B. DODGE, 2 vols., Columbia University Press, New York - London 1970, p. 603.

⁷ Concerning Aristotle's text, Ibn al-Nadīm assures that it was translated for the first time by Yaḥyā Ibn al-Biṭrīq (d. 815 ca.), that this translation was revised by Ḥunayn ibn Ishāq (d. 873) and that Abū Bīṣr Mattā ibn Yūnus (d. 940) also translated a part of the first book. These items of information are confirmed by al-Qifṭī, except for the revision by Ḥunayn ibn Ishāq which is not mentioned (AL-QIFṬĪ, *Ta' rīḥ al-ḥukamā'*, ed. J. LIPPERT, Dieterich'sche Verlagsbuchhandlung, Leipzig 1903, pp. 39-40).

⁸ Three anonymous translations are preserved. Two of them are complete, one of which is the revision of the other (at least for a part of it, i.e. I, 1-7), and a third one covers a part of the first book (i.e. *DC* I, 9-II, 9). According to G. Endress, the first translation is the one realized by Ibn al-Biṭrīq. Averroes, who uses it in his *Long Commentary*, refers to it as « one of the translations of al-Kindī ». This same translation was also translated into Latin by Gerard of Cremona (edited by I. Opelt in P. HOSSFELD ed., *Alberti Magni Opera Omnia*, t. V, pars. 1, *De Caelo et Mundo*, Aschendorf, Münster 1971). There are still doubts on the authorship of the preserved revised version, which could be attributed either to Ḥunayn ibn Ishāq or to Abū Bīṣr Mattā. Concerning the third partial one, there are some arguments in favor of its attribution to Abū al-Faraḡ ibn al-Ṭayyib. First of all, it is transmitted in a unique manuscript (BNF or. 2281) together with a commentary by the same Ibn al-Ṭayyib. Furthermore, on three occasions, Averroes in his *Long Commentary* quotes another translation, which he attributes to Abū al-Faraḡ. Finally, Ibn al-Ṣalāḥ (see n. 10) quotes a translation that he attributes to him. It must also be added that Ibn al-Ṣalāḥ has at his

concerning the Arabic tradition of the *DC*, the biographical sources and the authors directly engaged in the debate give us evidence of intense cultural and philosophical activity. On this point, Ibn al-Nadīm provides us with some rather ambiguous testimonies. He reports that a partial translation of Alexander's commentary on book I was carried out by Abū Bišr Mattā, and that the whole of Themistius' commentary was either translated or revised by Abū Zakariyyā Yahyā ibn 'Adī (d. 974). Concerning Themistius' paraphrase, the mathematician Abū al-Futūḥ Aḥmad ibn Muḥammad ibn al-Sarī ibn al-Ṣalāḥ⁹ (d. 1153) provides a different account¹⁰. He claims that Hunayn ibn Ishāq translated it from the Greek into Syriac, and Abū Bišr Mattā from the Syriac into Arabic, while Yahyā ibn 'Adī revised Mattā's translation¹¹.

Ibn al-Ṣalāḥ's testimony is also important because it contains information about what material was still accessible on the *DC* in 11th century Baghdad. In his question on the number of regular figures that can fill a space (related to Aristotle's statement in *DC* III, 306b8-38¹², he reports that he had access to a paraphrase of the *DC* by Nicholaus of Damascus, while he had partial knowledge of Alexander's commentary. He also tells us that he perused Themistius' paraphrase and a number of other works by Arabic authors, notably the paraphrases by al-Fārābī¹³ and by Abū Sahl 'Īsā ibn Yahyā al-Masīḥī (d. 1010), the correspondence between 'Īsā ibn Ishāq Ibn Zur'a (d. 1008) and Yahyā ibn 'Adī, as well as the commentary by Abū al-Farağ ibn al-Ṭayyib (d. 1043).

After mentioning Themistius' commentary, Ibn al-Nadīm also relates that there was something on 'this work' (*fihī*) by Hunayn ibn Ishāq, namely a collection of sixteen questions, and that Abū Zayd al-Balḥī (d. ca. 934) explained the beginning of 'this work' (*fihī*) for Abū Ġa'far al-Ḥāzin. From a grammatical

disposal a fourth translation that he attributes to 'Īsā ibn Ishāq Ibn Zur'a (d. 1008).

⁹ H. SUTER, *Die Mathematiker und Astronomen der Araber und ihre Werke*, Teubner, Leipzig 1900, p. 120, n. 287; N. RESCHER, *The Development of Arabic Logic*, University of Pittsburgh Press, Pittsburgh 1964, pp. 173-174.

¹⁰ M. TÜRKEK ed., *Ibnü's-Ṣalāḥ' in De Coelo ve onun Şerhleri hakkındaki tenkitleri*, « Araştırma », 2, 1964, pp. 1-79; EAD., *Les critiques d' Ibn al-Ṣalāḥ sur le De Caelo d'Aristote et sur ses commentaires*, in *La Filosofia della natura nel medioevo*. Atti del 3° Congresso internazionale di filosofia medioevale, Passo della Mendola, Trento, 31 agosto-5 settembre 1964, Vita e Pensiero, Milano 1966, pp. 242-252.

¹¹ On Themistius' paraphrase, see M. ZONTA, *Hebraica Veritas: Temistio, Parafrasi del De coelo. Tradizione e critica del testo*, « Aethenaeum », 82, 1994, pp. 403-428; cf. E. CODA, *Reconstructing the Text of Themistius' Paraphrase of the De Caelo. The Hebrew and Latin versions on the three meanings of the term 'Heaven'*, « Studia Graeco-Arabica », 4, 2014, pp. 1-15; EAD., *Alexander of Aphrodisias in Themistius' Paraphrase of the De Caelo*, « Studia Graeco-Arabica », 2, 2012, pp. 355-371.

¹² See n. 10.

¹³ The existence of a commentary by al-Fārābī is also confirmed by al-Qifṭī (AL-QIFṬĪ, *Ta'riḥ al-ḥukamā'*, p. 279) and Ibn abī Uṣaybi'a (IBN ABĪ UṢAYBĪ'A, *'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'*, ed. A. MÜLLER, 2 vols., Leipzig 1882-1884, repr. Frankfurt am Main 1995, p. 135).

point of view, it is not clear whether 'this work' in the last two quotations means Themistius' paraphrase or Aristotle's text. Assuming that at least the first reference is to Themistius' paraphrase, M. Alonso Alonso¹⁴ suggested that this compilation by Hunayn is to be identified with a treatise in sixteen questions translated from the Arabic into Latin and from the Latin into Hebrew, and wrongly transmitted as Avicenna's own DCM as part of the earliest Latin translation of his *Kitāb al-Šifā'*.¹⁵

Even if we still do not know the extent of Avicenna's direct access to his antecedents' writings, the DCM of the *Šifā'* must be placed in this historical framework and, as we are going to see, in the context of an on-going debate with Avicenna's contemporaries. Still, in order to appreciate his overall project and to highlight the treatise's own stakes, one must take a closer look at the Greek debate pertaining to the goal and the epistemological rank of Aristotle's DC. This debate, in fact, constitutes the broader background of the treatise, insofar as the arrangement Avicenna adopted can be seen as a way to answer the difficulties raised by his Greek predecessors.

1.2 The goal and the structure of Aristotle's *De Caelo* according to the Greek commentary tradition

There are two connected difficulties concerning the epistemological status of the DC that were discussed from the very beginning of the Aristotelian commentary tradition: the first concerns the subject-matter of the treatise, and hence its goal (σκοπός) and its unity¹⁶; the second one concerns its rank (τάξις) in the series of Aristotle's natural treatises. As is well known, the discussion of these difficulties was an integral part of the hermeneutic study that must precede the interpretation of a treatise according to the usual rules of the Greek commentary tradition¹⁷.

¹⁴ M. ALONSO ALONSO, *Hunayn traducido al Latin pour Ibn Dawūd y Domingo Gundisalvo*, « Al-Andalus », 16, 1951, pp. 37-47.

¹⁵ I will examine more closely Alonso's argument in a final appendix, where I will also point out the discrepancies between this treatise and Aristotle's DC.

¹⁶ The question concerning the goal (σκοπός) of the treatise is definitely the most crucial one. For the σκοπός is, to use P. Hoffmann's terminology, the *focus of unity* (« le foyer d'unité ») of a treatise (P. HOFFMANN, *Le σκοπός du traité aristotélicien Du Ciel selon Simplicius. Exégèse, dialectique, théologie*, « Studia Graeco-Arabica », 5, 2015, pp. 27-51: p. 29).

¹⁷ On the preliminary questions to be discussed according to the Late-Antiquity commentary tradition, see L. G. WESTERINK, *The Alexandrian Commentators and the Introductions to their Commentaries*, in R. SORABJI ed., *Aristotle transformed. The Ancient Commentators and their Influence*, Duckworth, London 1990, pp. 325-348; J. MANSFELD, *Prolegomena: Questions to be settled before the Study of an Author, or a Text*, Brill, Leiden - New York - Köln 1994; P. HOFFMANN, *La fonction des prologues exégétiques dans la pensée pédagogique néoplatonicienne*, in J. DUBOIS, B. ROUSSEL eds., *Entrer en matière. Les prologues*, Édition du Cerf, Paris 1998, pp. 209-245; M. RASHED, *Alexandre d'Aphrodise lecteur du Protreptique*, in J. HAMESSE ed., *Les prologues médiévaux*. Actes du colloque international Roma, 26-28 mars 1998, Brepols, Turnhout 2000, pp. 1-37.

In the case of the *DC*, unlike other works of Aristotle, the two questions were the subject of fervent debate¹⁸. First, the treatise seems to have more than one subject-matter and more than one goal: an inquiry on the sky and the stars, a study of the Earth, an investigation of the unitary and finite nature of the world, and a long examination of the generation of sublunary elements followed by a monograph on heavy and light; hence it seems to lack a real principle of unity. Second, part of its inquiry (i.e. the study of the elements) seems to overlap with the investigation of the second book of the *De Generatione et Corruptione* (hereafter *GC*), which is devoted to the generation and corruption of the four sublunary bodies and to related phenomena. In this sense, the difficulty consists in understanding the peculiar role of the second half of the *DC* with regard to what follows in the order of Aristotle's natural *corpus*.

In the Greek commentary tradition, the most disputed question was by far the first one. In the prologue of his commentary on the *DC*, Simplicius reports the status of the debate prompted by his predecessors¹⁹. The debate revolved both around the unity of the *DC* and the pertinence of its title, for since the title mirrors the content of the treatise, one has to explain how the title *περὶ οὐρανοῦ* can fit a treatise pertaining to such a variety of topics that exceeded the study of the celestial world²⁰.

To solve this difficulty, Alexander of Aphrodisias, according to Simplicius, maintained that the term *οὐρανός* can have three meanings: (1) the sphere of the fixed stars; (2) the whole supra-lunary world; (3) the cosmos in its entirety. He also makes clear that the relevant meaning in the case of the title *περὶ οὐρανοῦ* is the third one, since the goal of the treatise is the study of the whole world. *Οὐρανός*, thus, must be understood as a synonym of *κόσμος*²¹.

¹⁸ On the Greek debate, see P. MORAUX, *Aristote. Du Ciel*, Les Belles Lettres, Paris 1965, pp. VII-VIII; ID., « Kommentar zu *De caelo* », *Der Aristotelismus bei den Griechen, von Andronikos bis Alexander von Aphrodisias*, vol. III, Alexander von Aphrodisias, De Gruyter, Berlin - New York 2001, pp. 181-241: pp. 188-189; HOFFMANN, *Le σκοπός du traité aristotélicien Du Ciel* cit., pp. 27-51.

¹⁹ On Simplicius' prologue and its 'dialectical' nature, see HOFFMANN, *Le σκοπός du traité aristotélicien Du Ciel* cit.

²⁰ On the question concerning the title of a treatise, see P. HOFFMANN, *La problématique du titre des traités d'Aristote selon les commentateurs grecs. Quelques exemples*, in J.-C. FREDOUILLE, M.-O. GOULET-CAZÉ, P. HOFFMANN, P. PETITMENGIN eds., *Titres et articulations du texte dans les oeuvres antiques*. Actes du Colloque International de Chantilly, 13-15 décembre 1994, Brepols, Paris 1997, pp. 75-103; on the title *περὶ οὐρανοῦ* in particular, see pp. 82, 86-88.

²¹ SIMPL., *In De Cael.*, ed. I. L. HEIBERG, G. Reimeri, Berlin 1894 (CAG VII), pp. 1, 24 - 2, 4: « Alexander says that the subject of Aristotle's treatise *On the Heavens* is the world. He says that "Heaven" is used in three senses by Aristotle in this work, to mean both the sphere of the fixed stars and the whole of the divine revolving body, which in this books he also calls the "furthest heaven" (with the adjective), and additionally "the world", as Plato called it when he said "the whole heaven, or the world, or whatever else it might care to be called" (transl. R. J. Hankinson, in R. J. HANKINSON,

The same discussion is related at the beginning of Themistius' paraphrase²², which reports that according to the 'Ancients' the word οὐρανός can have three meanings, and that the scope of Aristotle's treatise is the whole world²³. According to this reading, the DC is a unitary treatise, since it has one single goal, i.e. the universe as a whole (κόσμος) with its constitutive parts, even if the inquiry implies the study of topics that are proper to one portion of it and not to another, as well as an investigation of the nature of the whole world as such.

This reading, however, is challenged by the Neoplatonic readers of Aristotle, notably Iamblichus and Syrianus, who insist on the pre-eminence of the cosmological part of the treatise. According to Simplicius' testimony, Iamblichus admits that the different inquiries of the treatise do not have the same status, for the study of the celestial world is the real and primary goal of the treatise, while the inquiry into the other topics is merely secondary and dependent upon the study of the primary one²⁴. Syrianus takes this reading to its extreme consequences, by arguing that the same principle governs the different meanings of οὐρανός and the various topics of the treatise: the proper meaning of οὐρανός is the celestial world, which also designates the real and unique goal of the treatise²⁵.

As this debate continues, Simplicius suggests a reading that endorses both elements of the interpretation of Alexander and Iamblichus. He admits that some discussions pertain to the whole universe and to the sublunary world, but he makes clear that all the properties considered in the treatise, i.e. the finite and unique nature of the whole as well as the characteristic properties of the four sublunary bodies, are studied insofar as they are *caused* by the celestial world, which constitutes the primary goal of the treatise. Thus, unlike the *Timaeus*, which really is a treatise on the whole world, the DC is a treatise on its parts and, more precisely, on the most excellent one, i.e. the supralunary body, which is the remote *cause* of what happens in the sublunary world, as well as of the

Simplicius. On Aristotle On the Heavens 1.1-4, Duckworth, London 2002, p. 19). In his commentary on the *Meteorology*, Alexander presents the same threefold division of the meanings of οὐρανός (cf. ALEX., *In Meteor.*, ed. M. HAYDUCK, G. Reimeri, Berlin 1899 [CAG III, 2], p. 41, 20-22) and in the prologue of the same commentary, he describes the content of the DC in the same terms as those used in Simplicius' commentary (ALEX., *In Meteor.*, pp. 1, 12 - 2, 5).

²² The original Greek and the Arabic translation are now lost. On the status of the Arabic-Hebrew and of the Hebrew-Latin translation, see CODA, *Reconstructing the Text of Themistius' Paraphrase* cit. See also EAD., *Alexander of Aphrodisias in Themistius' Paraphrase* cit.

²³ The three meanings are enumerated by Aristotle himself in DC I, 9, 278b9-24, but a comparison between Themistius' and Simplicius' texts shows that the common source is Alexander of Aphrodisias.

²⁴ SIMPL., *In De Cael.*, pp. 1, 24 - 2, 4.

²⁵ SIMPL., *In De Cael.*, p. 2, 7.

unique and finite nature of the whole world²⁶. Accordingly, one can conclude that on Simplicius' interpretation, the hierarchical structure of the topics of the *DC* mirrors the hierarchical order of the universe²⁷.

These three different solutions to the question concerning the title and the goal of the *DC* give us some hints toward the answer to the question of the rank of the treatise and its relationship to the *GC*. As regards Alexander, we can reconstruct his stance from his commentary on the *Meteor*. Commenting on the first lines of the treatise, Alexander claims that the *DC* deals at the same time with « the ordered stars according to their upper movement » (περί τε τῶν κατὰ τὴν ἄνω φοράν διακεκοσμημένων) and with the elements, or more precisely the « corporeal elements » (περί τῶν στοιχείων τῶν σωματικῶν)²⁸. He makes clear that while the first expression designates the study of the movement of the last sphere (τὴν ἐξωτάτω τε καὶ κύκλῳ περιφορὰν), the second one refers to an inquiry into the elements, which aims at establishing their number and their quality (πόσα τε καὶ ποῖα). Accordingly, he concludes that Aristotle's goal in the *DC* is to show that there are five elements and to elucidate « what they are » (τὸ γὰρ ποῖα δηλωτικὸν ἂν εἴη τοῦ τίνα), i.e. the four sublunary elements and the fifth one that moves in a circle (τὰ τέσσαρα μετὰ τοῦ κυκλοφορικοῦ σώματος πέμπτου).

Following Alexander, we can point out that the enquiry into the simple bodies is split into a two-stage investigation: the first stage, carried out in *DC* I, establishes the existence and the number of the simple bodies; the second one, accomplished in the second part of the treatise, explains what they are. According to Alexander's reading, thus, the second part of the *DC* is integrated within a more general inquiry concerning the « elements of the universe » (στοιχεῖα τοῦ κόσμου)²⁹. This enquiry, as Alexander also spells out, ends in the second book of *GC*, which « completes » (τελειώσας) the *DC*'s study of the elements, inasmuch as it studies their reciprocal transformation (εἰς ἄλληλα μεταβολῆς)³⁰.

²⁶ SIMPL., *In De Cael.*, p. 5, 32-34: « And it is not necessary on account of this to imagine the world to be the subject, but rather the simple bodies of which the most primary is the heaven which gives a share of its goods to the whole world » (transl. Hankinson, in HANKINSON, *Simplicius cit.*, p. 23).

²⁷ On the 'hierarchical' nature of Simplicius' reading, see P. HOFFMANN, *Science théologique et foi selon le Commentaire de Simplicius au De Caelo d'Aristote*, in E. CODA, C. MARTINI BONADEO eds., *De l'Antiquité tardive au Moyen Âge. Études de logique aristotélicienne et de philosophie grecque, syriaque, arabe et latine offertes à Henri Hugonnard-Roche*, Vrin, Paris 2014, pp. 277-363.

²⁸ Alexander makes it clear that the term στοιχεῖα without further specification designates matter and form, which are the topic of the general study of the first book of the *Physics*. This fits with Alexander's reading of the first lines of *Phys.*, I, 1, and the goal of the *Physics* reported by Averroes in his *Long Commentary on Phys.*, I, 1. For more details, see C. CERAMI, *Génération et Substance. Aristote et Averroès entre physique et métaphysique*, W. De Gruyter, Boston - Berlin 2015, p. 295 et ss.

²⁹ ALEX. *In Meteor.*, pp. 1, 12 - 2, 6.

³⁰ *Ibid.* p. 2, 6-10.

For the Neoplatonic readers, we can infer that despite their differences, one single answer fits all their interpretations. According to their reading, *GC II* can be seen as the study of the simple sublunary bodies and their properties *as such*. In fact, according to the readings of Iamblichus and Syrianus, the sublunary bodies are not within the real scope of the *DC*, but they are considered in its inquiry only insofar as they show us what the fifth body is not. According to Simplicius, as we have already seen, if Aristotle studies the four sublunary elements in the *DC*, it is not *as such*, but in so far as they are *caused* by the supralunary world. In both cases, then, the study of the sublunary elements in the *GC* is not a mere repetition of the one in the *DC*.

Now that the philosophical and historical stage of the reception of Aristotle's *DC* has been set, let us see in more detail how Avicenna organizes his own *DCM*, and how his approach enables a solution of both the structural tensions underlying Aristotle's *DC* and the doubts about its content raised by its Greek and Arabic readers.

II. THE *DE CAELO ET MUNDO* OF AVICENNA'S *ŠIFĀ'*: A STUDY OF BODIES WITH RESPECT TO THEIR POWERS

The *DCM* is the second part of the section of the *Šifā'* devoted to the philosophy of nature (*al-Ṭabī'īyyāt*). The treatise is developed in 10 chapters. It contains three chapters on the nature of the five simple bodies, integrated within a larger research on the body considered with respect to its power (chap. 1-3), four chapters on the dispositions and movements of the celestial bodies as such (chap. 4-7), two chapters on the opinions of the predecessors on what has been previously examined (chap. 8-9), and one final chapter on the uniqueness of the world, in which the predecessors' opinions on this topic are also refuted (chap. 10).

Table 1: Outline of Avicenna's *De Caelo et Mundo* compared to Aristotle's *De Caelo*

Avicenna's DCM	Aristotle's DC
Chapter 1: On the power and acts of simple and composite bodies.	I, 2
Chapter 2: On simple powers and simple movements, and on the proof that the spherical nature is outside the elemental natures.	I, 2-4 + IV, 1, 3-4
Chapter 3: On the indications concerning the essences of the simple bodies, on their order, their features and the figures that belong to them by nature, as well as on their differences with respect to the sphere.	IV, 6 + I, 2-4
Chapter 4: On the dispositions of the body that moves in a circle, on the nature of its movement, and on what belongs to it properly.	II, 3
Chapter 5: On the disposition of the stars and the spots of the moon.	II, 10-12
Chapter 6: On the proper movements of the stars.	II, 7-8
Chapter 7: On what is inside the celestial body and on what men say about the disposition of the earth and the other elements.	II, 14
Chapter 8: Refutation of the silly opinions on the justification of the fact that the earth is at rest.	II, 13
Chapter 9: On the controversy between men concerning heavy and light.	III, 2-8, IV, 2
Chapter 10: On the fact that the world is one and not many, as some claimed.	I, 8-9

What is immediately striking when one looks at the table of contents of the DCM of the *Šifā'* is its structure. With regard to both arrangement and content, the DCM does not correspond to a treatise of cosmology, at least if we mean by that a study of the so-called 'supralunary' world, to use Aristotelian terminology. Actually, the very beginning of the treatise does not announce a study of the celestial world, but a study of the simple bodies considered from the point of view of their powers. Moreover, nearly half the treatise is devoted to the study of the four simple sublunary bodies and to the doctrines about their nature that were held by earlier thinkers.

To this *prima facie* appraisal, one might object that in choosing this arrangement Avicenna is merely following Aristotle's treatise — or at least the text as it was transmitted after the 1st century B.C.³¹ — which develops into two quite separate sections, the first one (DC I-II) devoted roughly speaking to cosmological issues, the second one (DC III-IV) devoted to the four sublunary bodies and to their characteristic properties: lightness and heaviness. However, even a cursory glance at the table of contents of Aristotle's DC shows that there are several significant differences between the two treatises, which cannot be overlooked.

We must remark first of all that, although the DCM as a whole shares the same twofold structure of the Aristotelian DC, Avicenna's treatise involves three major modifications with respect to the arrangement of the two sections: 1) unlike Aristotle, Avicenna does not postpone the study of the sublunary simple bodies until after the investigation of the celestial one, but combines the two inquiries, so that all the issues concerning sublunary simple bodies that are discussed by Aristotle in DC III-IV, are addressed by Avicenna at the beginning of the treatise; 2) the analysis and refutation of the predecessors' doctrines, scattered in the Aristotelian DC throughout books III and IV, are gathered together and placed after what one may call the positive discussion of Avicenna's treatise; 3) the proof of the uniqueness of the world, which Aristotle establishes in I, 8-9, at least according to the current division of his DC, is provided by Avicenna in the last chapter of his own treatise. Moreover, concerning the very beginning of the treatise, it also must be noticed that Avicenna's DCM does not open with an acknowledgment of the perfection of the body supported by arguments akin to Pythagorean doctrines, as is the case in the Aristotelian treatise (DC I, 1). Instead, it starts abruptly with a threefold division of bodies considered with respect to their powers.

The arrangement chosen by Avicenna can be accounted for if one considers the entire treatise as pursuing a twofold strategy, striving on the one hand to meet the epistemological standards of a unitary inquiry and on the other hand to inscribe the DCM within the continuity of the *Physics* of the Šifā'. This hypothesis is confirmed by a more detailed study of the first chapters. The way in which Avicenna announces the goal of his research and presents its subject-matter highlights the philosophical agenda of the entire treatise. In fact, the study of the four sublunary simple bodies is not incidentally appended to the study of the celestial body, but it is part of one single inquiry aiming at revealing the proper nature of the five simple constituents of the whole world. One can therefore

³¹ The paternity of the DC, in its actual state, has been challenged by several modern scholars who dispute the originality of the link between books I-II and books III-IV. On the contemporary debate over the unity of the treatise, and for a new solution of the difficulties concerning the epistemological status of the DC, see CERAMI, *Génération et Substance* cit., pp. 44-50.

plausibly argue that Avicenna shares Alexander's general solution: the *DCM* is a study of the whole world and of its simple constituents³².

Before delving into the content of Avicenna's study, two preliminary objections must be taken into account in order to understand correctly our general assumption. First of all, one can object that the study of the simple bodies, by setting up a comparison between the four sublunary bodies and the celestial body, aims at proving that the celestial body has a peculiar nature. The celestial body should then be defined as the real subject-matter of the treatise, since Avicenna first considers its eternal nature and, afterwards, its proper characteristics (movements, shape, etc.). Second, one might allege that the inquiry into the whole world as such is limited to one final chapter devoted to the proof of its uniqueness and, furthermore, that this verification is framed in the context of the refutation of the predecessors' mistaken opinions on this topic. In this sense, it might be maintained that this investigation does not suffice to make the *DCM* a treatise on the whole world.

To the first objection, we can reply that the fact that the study of the simple bodies reveals the peculiar nature of the celestial body does not constitute a sufficient argument to infer that the primary, if not unique goal of the entire section is to establish the nature of this body. For this inquiry is essentially integrated within a more general investigation, i.e. the study of bodies considered with respect to their power, which Avicenna announces at the very beginning of his treatise.

Concerning the second objection, a quick look at the arguments used at the end of the treatise to prove the uniqueness of the world helps us to understand the nature of the final chapter and qualify our general assumption. All the arguments used to conclude that there cannot be a plurality of worlds rely on the properties of the five simple bodies set forth in the previous chapters. Indeed, the uniqueness of the world is verified by appealing either to the proper nature of the four simple sublunary bodies, or to that of the fifth celestial body³³. In this sense, we can safely assume that the discussion concerning the uniqueness of the world is included in the *DCM* as a part of the general inquiry into its simple constituents³⁴, for the uniqueness of the world is considered here

³² It is difficult to say whether Avicenna had direct access to Alexander's commentary on the *DC*. Since Ibn al-Šalāh attests that in his time Alexander's commentary on the first book was still accessible, it is not implausible that it was also available to Avicenna. However, at the present stage of research, this hypothesis cannot be corroborated and remains a matter of speculation.

³³ AVICENNA, *DCM*, pp. 71-76.

³⁴ It is noteworthy that Avicenna closes the ninth chapter by affirming that after having finished the inquiry into the constituents of the world, it is now time to ask whether the corporeal world is one or many. *Ibid.* p. 69, 10-12.

to be a consequence of the nature of its five constituents. We can thus conclude that this study does not jeopardise the unitary character of the DCM. On the contrary, it contributes to clarifying its overall project: the DCM can be defined as an inquiry into the world *insofar as* it provides an investigation of the simple bodies that constitute it as a whole.

A closer examination of the chapters devoted to the simple bodies confirms and elucidates this general assessment, but also sheds light on the way in which Avicenna's DCM provides a solution to the second difficulty underlying the Aristotelian treatise, i.e. the question concerning the relationship between the study of the four sublunary bodies in the DC and the study of these elements in the GC. In fact, an analysis of these chapters of the DCM will show that the way in which Avicenna takes the simple bodies into consideration, i.e. with respect to their powers, also provides a solution to this difficulty. For the study provided in these chapters constitutes in itself an argument in support of the complementary nature of the two inquiries provided in DC III-IV and in GC II, and against their supposed redundancy.

II. 1 *The notion of power (quwwa) at the core of the DCM*

Avicenna opens his DCM abruptly by delimiting the subject of the inquiry. This demarcation is obtained by a division of the notion of body considered with respect to its power. Avicenna states that bodies can be understood with respect to their powers (*al-aḡsām min ḡihati quwāhā*) according to a threefold division: either I) the body is one, non composite and endowed with one single power; or II) the body is one, non composite and endowed with two powers; or III) the body is the product of the composition of many mixed bodies, all characterized by different powers, which IIIa) either interact so that one single common complexional power (*quwwa wāḥida mizāḡiyya muštāraka*) occurs, IIIb) or do not interact³⁵.

These opening remarks tell us a great deal about how Avicenna conceives his work. The restriction 'with respect to their powers' provides the key notion of the entire discussion. By adding it, Avicenna integrates the inquiry of the DCM within a wider philosophical context, which is the study of the natural body, and hence adapts the opening declaration of Aristotle's DC.

In announcing the study to come, Aristotle states at the beginning of DC I, 2 that before taking into consideration the question of the limited or infinite nature of the whole, he plans to study the latter's parts according to species

³⁵ AVICENNA, DCM, p. 1, 7-11.

(τῶν κατ' εἶδος αὐτοῦ μορίων)³⁶. This statement can be interpreted in a weaker or in a stronger sense, depending on the meaning one attributes to the term εἶδος: as designating a class or the substantial form³⁷. By interpreting this term as designating a class, one can assume that Aristotle is simply announcing his intention to study the different kinds of bodies. This, for example, is Simplicius' interpretation³⁸. According to the stronger interpretation, on the contrary, and by taking the notion of εἶδος in a clear-cut ontological sense³⁹, Avicenna reorients Aristotle's text and announces a thoroughly reconceived project: the aim of the present investigation is not just to study the bodies according to their species, but to study them with respect to their power⁴⁰.

It must also be emphasized that by proceeding in this way, Avicenna does not simply reinterpret Aristotle's *DC*, but also integrates his own *DCM* within a unified inquiry whose first step was accomplished in the *Physics* of the *Šifā*⁴¹. As I wish to argue, in fact, the notion of power constitutes the link between the two investigations. Let us briefly consider the elements authorizing the establishment of such a link.

At the beginning of the *Physics*⁴², Avicenna makes clear that the starting point of the enquiry is the definition of 'the natural body'⁴³ and that this body, insofar

³⁶ ARISTOTLE, *DC* I, 2, 268b11-268b14 « The question as to the nature of the whole, whether it is infinite in size or limited in its total mass, is a matter for subsequent inquiry. Let us now speak of those parts of the whole according to their species, taking this as our starting-point ».

³⁷ This is possible at least in principle, since in Greek the term εἶδος can have both meanings.

³⁸ Cf. SIMPL. *In DC*, p. 11, 26.

³⁹ The term εἶδος in Greek could ambiguously designate a class of individuals and their respective ontological principle, i.e. the form. In the Arabic-Latin translation of Aristotle's *DC* that is transmitted with Averroes' *Long Commentary*, the term εἶδος is translated by *formarum* which undoubtedly translates the Arabic *šūra*, unequivocally designating the form and not the species.

⁴⁰ The identification of the form with the power of the body is an essential part of Avicenna's physics. The history of this doctrine and the way in which this identification renewed the Aristotelian notion of form is still a desideratum. This doctrine goes back to Alexander, but it is charged in Avicenna with a stronger Neoplatonic nuance.

⁴¹ Concerning the order of the two treatises, in the letter to al-Kiyā ('A. BADAWI ed., *Aristū 'inda al-'Arab*, Maktabat al-Nahḍa al-Miṣriyya, Le Caire 1947, p. 119-122), Avicenna clearly asserts the necessity of studying the *Physics* before the *DC*. We will come back to this text later.

⁴² On the structure of the *Physics* of the *Šifā*, and on how Avicenna achieves a reorganization of Aristotle's *Physics*, see A. HASNAWI, *Aspects de la synthèse avicennienne*, in M. A. SINACEUR ed., *Penser avec Aristote*, Erès, Toulouse 1991, pp. 227-244; Id., *La physique du Šifā: aperçus sur sa structure et son contenu*, in J. JANSSENS, D. DE SMET eds., *Avicenna and His Heritage*. Proceedings of the International Colloquium « Avicenna and his Heritage », Leuven - Louvain-la-Neuve, 8-11 Septembre 1999, Leuven University Press, Leuven 2002, pp. 67-80.

⁴³ IBN-SINĀ, *Al-Šifā', al-Ṭabī'iyāt, al-Samā' al-Ṭabī'ī*, ed. S. ZĀYID, Al-Hay'a al-Miṣriyya al-'amma li-l-kitāb, Cairo 1983 (hereafter AVICENNA, *Phys.*), I. 2, p. 13, 4-6: « We say, then, that the natural body is a substance in which one can posit one dimension, and another crossing it perpendicularly, and a third dimension crossing both of them perpendicularly, where its being of this sort is the form by which it becomes a body » (transl. J. McGinnis modified).

as it is subject to change, is the subject-matter of the treatise. He announces, then, that the goal of the enquiry is to investigate the necessary accidents belonging to this body as such, the concomitants that attach to it insofar as it is, whether they be forms, accidents, or derivatives of the two, as well as its principles, reasons and causes⁴⁴. Afterwards, he makes clear that the body is called 'natural' in relation to the power (*quwwa*) called 'nature'⁴⁵. He then defines the nature as the internal principle of motion and action, and distinguishes four ways in which nature and power can be identified⁴⁶. He concludes by stating that the power/nature examined at present is the internal power « which brings about motion and change, and from which the action proceeds in a single manner without volition »⁴⁷.

After defining nature, Avicenna establishes its relationship with matter, form and motion. He explains that in the case of simple bodies, the nature is the same thing as the form and, hence, as the power⁴⁸. Immediately afterwards, however, Avicenna adds that this power can be considered from several points of view, depending on whether it is the principle of action and motion or the principle of the subsistence of matter. He thus claims that when it is related to the motions and actions that proceed from it, it is called nature; whereas when it is considered to be the principle accounting for the subsistence of the species the body belongs to, and if the effects and motions that proceed from it are not taken into account, it is then called form⁴⁹.

Avicenna considers the case of water, and claims that its form is imperceptible, while its effects (*al-ātār*) are perceptible. Following the same division put forward in the definition of nature (defined as the internal principle of motion and action), he distinguishes, among the effects of the form, those relative to its passive/active influence, namely coolness and wetness, from those relative to its proximate/proper place, namely motion and rest, which he also equates with the weight and the inclination of the body:

« So the form of water, for instance, is a power that makes the water's matter to subsist as a species [— namely, water]. The former [namely, the form] is

⁴⁴ AVICENNA, *Phys.*, I. 1, p. 3, 9-4, 7.

⁴⁵ On the identification of the nature with the power of the body, see A. LAMMER, *Defining Nature. From Aristotle to Philoponus to Avicenna*, in A. ALWISHAH, J. HAYES eds., *Aristotle and the Arabic Tradition*, Cambridge University Press, Cambridge 2015, pp. 121-142.

⁴⁶ AVICENNA, *Phys.*, I. 5, p. 39, 4-9.

⁴⁷ AVICENNA, *Phys.*, I. 5, p. 39, 2-4.

⁴⁸ *Ibid.*, I. 6, p. 45, 7-8: « In some cases, the nature of the thing is just its form, whereas in others it is not. In the case of the simples [that is, the elements], the nature is the very form itself, for water's nature is [for example] the very essence by which it is water ».

⁴⁹ *Ibid.*, p. 45, 9-11.

imperceptible, but the effects that proceed from it are perceptible — namely, on the basis of the perceptible coolness and weight (which is the actual inclination and does not belong to the body while it is in its natural location). So the nature's act in, for example, the substance of water is either relative to its passive influence and so is coolness; or it is relative to its active influence, which shapes [something else], and so is wetness; or it is relative to its proximate place and so is setting in motion; or is relative to its proper place and so is bringing about rest. Now, this coolness and wetness are necessary accidents of this nature, given that there is no impediment »⁵⁰ (trans. J. McGinnis modified).

The form of the simple body, identified with its nature, is thus the internal principle of a certain number of 'effects'; it is an internal principle of action and passion as well as of movement and rest. Weight and inclination are also considered to be effects of the form, but Avicenna warns that they actually belong to the body only when the latter is in its 'proximate' place and not in its 'proper' place, namely, its natural location⁵¹.

The notion of power, therefore, is at the very core of the physical inquiry. In the *Physics* of the *Šifā'*, Avicenna identifies the power of the natural body with its internal principle of movement, its nature and its form. What remains to be done, however, is to clarify the kind of principle this power is by studying in particular the different kinds of natural bodies, simple and composite.

If we return to the first lines of the *DCM*, it becomes clear that this is exactly what Avicenna announces. These lines, and the whole division of the body with respect to its power reveal that Avicenna is here embarking on an enquiry that takes its place in continuity with the *Physics*. This enquiry begins with the *DCM*, but goes beyond it. In the same lines, in fact, after positing his first threefold division, Avicenna narrows the subject-matter of the present study, and makes it clear that he is going to set aside the third branch of the division, in order to concentrate on the second one (II), that is, the simple body endowed with two powers⁵². From the outset, then, simple bodies considered with respect to their power — and not the celestial body alone — are announced as the subject-matter of the *DCM*. It is to them that the entire enquiry is devoted. What is excluded is the study of complex bodies.

The thorough analysis of each branch of this division is not easy to follow, and the very relevance of Avicenna's overall analysis is difficult to understand.

⁵⁰ *Ibid.*, pp. 34, 14 - 35, 4.

⁵¹ On the notion of inclination, see A. HASNAOUI, *La dynamique d'ibn Sīnā. La notion d'"inclination": mayl*, in J. JOLIVET, R. RASHED eds., *Études sur Avicenne*, Les Belles Lettres, Paris 1984, pp. 103-123; ID., *La théorie avicennienne de l'impetus. Ibn Sīnā entre Jean Philopon et Jean Buridan*, in M. ARFA MENSIA ed., *Views on the Philosophy of Ibn Sīnā and Mullā Ṣadrā al-Šīrāzī*, (Carthage, 22nd -24th Oct. 2013), al-Mağma' al-Tūnīsī li-l-'Ulūm wa-l-ādāb wa-l-Funūn, Tunis 2014, pp. 25-42.

⁵² AVICENNA, *DCM*, p. 1, 13.

As a matter of fact, its ultimate goal becomes clear when one considers the wider context of the first three chapters. A closer survey of Avicenna's entire investigation, as I wish to show, points out that its ultimate aim is to show that each simple body has one multidimensional but unitary power. By progressively rejecting all the different branches that imply that the power of a simple body results from the simultaneous occurrence of many ontologically heterogeneous principles, Avicenna wants to show that any simple body — whether it is a part of the sublunary world or of the supralunary world — is endowed with a power that, though displaying a multi-layered nature, remains a unitary principle. His strategy consists in establishing, in the first chapter, a paradigm for the four sublunary bodies and in extending it, as far as possible, to the celestial body. In what follows, I will provide a more detailed assessment of this assumption and suggest that, in relying on al-Fārābī's counterarguments against Philoponus' criticisms, Avicenna's ultimate goal is to challenge an Arab neo-Philoponian trend⁵³.

II.2 *The unitary nature of the active/passive power*

According to the plan we have just sketched, the first goal of Avicenna's analysis is thus to understand if and how the posited division (i.e. II) captures the nature of the simple bodies possessing a twofold power, namely the four sublunary bodies⁵⁴. Avicenna assures that when we suppose that a simple body has two powers, we once again have a threefold division according to the relationship the two supposed powers entertain with each other and with the form: IIa) the two powers differ from the form of the body, for either they follow the form (*tābi 'āni lahā*) or they occur from the outside (*'arīḍāni min ḥārīḡ*); IIb) one of the two powers is the form, while the other is a consequent (*lāzim*) or an accident (*'arīḡ*); IIc) neither of the two powers is an accident, but from the interaction of both one single form occurs, so that it is by virtue of this form that the body belongs to a certain species⁵⁵.

⁵³ A. Hasnaoui was the first scholar to highlight the role of Avicenna's anti-Philoponian stance in the DCM. Referring to the second chapter of the DCM, in an unpublished paper presented in 2013 (in the context of the international conference *Physika: Aristotle's Physics In the Greek, Arabic, Hebrew and Latin Traditions* that I organized in Paris with A. Falcon), he suggests that Avicenna elaborates his theory of the inclination against Philoponus, without ever mentioning him by name. In the wake of this general hypothesis, I would rather suggest that Avicenna is not directly opposing Philoponus, but a neo-Philoponian Arabic author. In this sense, I share M. Rashed's hypothesis that Avicenna in his DCM tackles neo-Philoponian arguments (see RASHED, *The Problem of the Composition* cit.) and I attempt, in what follows, to sketch the profile of their author.

⁵⁴ On the link Avicenna establishes between form and sensible qualities, see AL-ḤASAN IBN MŪSĀ AL-NAWBAKHTĪ, *Commentary on Aristotle De generatione et corruptione*, Edition, translation and commentary by M. RASHED, W. De Gruyter, Boston - Berlin 2015, pp. 237-272; 291-306.

⁵⁵ AVICENNA, DCM, p. 2, 2-7.

Avicenna goes on to analyse the third subsection: IIc) «neither of the two powers is an accident, but from the interaction of both one single form occurs, so that it is by virtue of this form that the body belongs to a certain species». The study of this supplementary division shows that Avicenna's investigation aims first at clarifying the role of the powers in the ontological constitution of the simple bodies. For — as he makes it clear — the question at issue is to understand whether the presence of two powers can guarantee, in one way or another, the existence of a unitary form of a simple body and, therefore, its inclusion in one species⁵⁶.

He divides this branch as well into three: IIc,i) each one of the two powers is capable of making the matter a subsisting substance in act; IIc,ii) only one of the two powers is capable of doing so; c, iii) only the combination of the two powers (*maǧmū 'uhumā*) can do so. Let us set aside for the time being the first two subdivisions (IIc,i-ii), since Avicenna rules them out quickly to focus on the third one⁵⁷. He points out that if we suppose that the two powers together make the matter a subsisting substance, we can identify them with the form. Still, we have to explain how the two powers can constitute one single principle. One can suppose either that (IIc,iii,α) each power is part of the form as a distinguishable (*mutamayyiz*) and separable (*munfaṣil*) part of a composite, i.e. as matter and form are parts of the composite; or (IIc,iii,β) that this is not the case, but that each power is an indistinguishable and inseparable part of the form, as are genus and differentia⁵⁸.

Avicenna goes on to analyse these two possibilities (IIc,iii,α-β). In this case too, it is not an easy task to follow his assessment. From what follows, however, it appears that his aim is not so much to reject these two options absolutely, as to provide the conceptual tools for understanding the multi-layered nature of the power of simple bodies, notwithstanding its ontological capacity to substantify matter.

Concerning the second option (IIc,iii,β), Avicenna does not explicitly reject its validity. He points out that if the powers are constitutive parts of the form as genus and differentia, then what proceeds from each one of them will not be a proper (*hāṣṣ*) and specific (*naw'iy*) act (*fi l*), but a generic act from one of the two powers, which is specified by the other one. This — Avicenna affirms — is not to be denied *absolute loquendo*, since it helps to understand the notion of movement conceived in an absolute way (*ḥaraka muṭlaqa*)⁵⁹.

⁵⁶ *Ibid.*, pp. 2, 9 - 3, 13.

⁵⁷ He points out that the first option (c, i) is not viable, since each power would be at the same time a form and an accident, which is absurd. If we consider each power as a form, but we assume that there are two powers, we are forced to admit that they are reciprocally the form of one another. As for the second option (c, ii), Avicenna merely states that it brings us back to the previous subdivision, i.e. b): one of the two powers is the form, while the other is a consequent (*lāzim*) or an accident (*'arīḍ*).

⁵⁸ AVICENNA, *DCM*, pp. 2, 16 - 3, 3.

⁵⁹ *Ibid.*, p. 3, 2-3.

Avicenna next considers the possibility that the two powers are constitutive parts of the form as matter and form (IIc, iii, α); then he states that this possibility is also not viable, since it has been supposed that the two powers were capable of substantifying matter *together*. If the two powers were parts as matter and form, one of the two (i.e. the one that is not part as a form) would be a consequent of the other, since the latter would be essentially prior. This ontological inequality, Avicenna explains, is not to be completely discarded, for it is true that among the dispositions (*hay'āt*) of the body, that whose subsistence depends on the existence of the other is posterior to it. What must be denied is that in this case the two powers can be considered as being on the same ontological level; for this option amounts to option IIb⁶⁰.

Against the background of this analysis, Avicenna concludes that it is not possible for two forms, one of which is prior to the other, to be equally capable of making matter a subsisting substance. He points out, however, that this does not invalidate the possibility that there is an ontological *décalage* among the dispositions of a natural simple body. On the contrary, according to him, three points of the analysis of these different options (IIc, iii, α - β) must be retained: i) we must first admit that in the power of a simple body, something is more closely linked to matter and something to form; ii) secondly, that some of the simple body's dispositions can be ontological posterior to others; iii) finally, that in a unitary power we can single out a generic and a specific aspect without compromising its ontological simplicity. These three assumptions provide the tools for a more precise understanding of the link between the power, the form and the movement of the simple bodies and for ascertaining the multi-layered but unitary nature of their power.

The whole division and its ultimate goal become clear when Avicenna illustrates his statements with some examples. We thus understand that among the three aforementioned indications, the first one aims at clarifying the power with respect to the active and passive capacities stemming from it, while the other two elucidate the nature of the power with respect to its capacity to move the body. The entire discussion aims at defining the nature of these two powers in the sublunary simple bodies. Avicenna's ultimate goal is to show that the two constitute a kind of ontological unity, and that each one of them belongs exclusively to one single body.

Avicenna first considers the active and passive capacities. He claims that they stem from one single and unitary principle, but he makes clear that the first one proceeds from the power — which Avicenna explicitly identifies with the nature — insofar as it is form, while the second one proceeds from it insofar

⁶⁰ *Ibid.*, p. 3, 4-7.

as it is matter. We have thus one single nature with a twofold capacity, i.e. with an active and a passive aspect. In the case of water, for example, the sensible coolness (*al-burd al-maḥsūs*) is the active capacity (*quwwa fi 'liyya*), which proceeds from the nature as from the form, while the humidity (*al-ruṭūba*) is the passive capacity (*quwwa infi 'āliyya*), which proceeds from the nature as from the matter:

«The impossibility of this division [i.e. IIciii)] has thus become evident. For it is impossible that two forms, among which one is not prior to the other, together make the matter subsist. On the contrary, it is possible that from one unique simple nature, insofar as it is form, there proceeds an active power (as from the nature of water proceeds the sensible coolness) and that another passive power comes from it, with respect to its matter, as moisture in the case of water»⁶¹.

Here, the matter/form distinction is employed to account for the unitary nature of the active/passive power. In *Phys.*, I.6, as we have already seen, Avicenna suggest that nature, defined as the internal power that brings about action, acts so as to produce a passive and an active influence, while, understood as the principle that makes matter a subsisting substance, it is called form. At the end of the same chapter, Avicenna states that in simple bodies, nature clearly cannot be matter, for the latter is the same in all such bodies⁶². By using the matter/form distinction in the *DCM*, he goes in exactly the same direction. The passive power cannot stem from the simple body's matter, but its effect can be more akin to this matter than to the form. This does not mean that the active influence is form, but that it is closer to the form than to the matter.

In assessing this first part of the division, Avicenna can conclude that there is only one unitary principle and a double-sided effective power, which means a unitary power with a multifarious capacity, i.e. an active and a passive one. What he has to clarify now is the nature of the other power, i.e. the motive capacity, its link to the form, and if and how can we account for its unitary nature. At the end of *Phys.*, I.6, as we have also seen, Avicenna points out that motion is more distant from the nature of simple bodies and that, being «foreign to the substance», «it arises in the case of deficiency»⁶³. Accordingly, he assures that the body's weight, that is, its inclination, does not belong to the simple sublunary body while it is at rest in its natural location, and that 'nature's act' in this body is not the movement in its 'proximate place', but rest in its 'proper place'. In this ontological framework, therefore, it is not misleading to conclude that the

⁶¹ *Ibid.*, p. 3, 14-17.

⁶² AVICENNA, *Phys.*, I.6, p. 49, 1-2.

⁶³ *Phys.*, I.6, p. 49, 6-7: «As for motion, it is the farthest removed from being the nature of things, for, as will become clear, it arises in the case of deficiency and is foreign to the substance».

active/passive power is more closely related to the form of the simple body, while the motive power is in a sense more remote from it. We will see that this is also what Avicenna confirms in the final lines of DCM 1, as in the following chapter.

II. 3 *The unitary nature of the inclinatory power and its one-to-one relationship with the simple body*

Once the unitary nature of the active/passive power and its link to the form has been assessed, Avicenna goes on to clarify the nature of the motive capacity. He first claims that the motive capacity cannot stem from the form alone, although it cannot be chronologically posterior to the form, either. He then asserts that this capacity, as the active/passive power, is a unitary power in which we can recognize some kind of complexity. Unlike the active/passive capacity, however, the complexity of the motive power cannot be accounted for by appealing to the distinction between matter and form, but by calling upon the distinction between genus and differentia. The clarification of this twofold assumption is the core of the last part of the first chapter and of the next one. Avicenna follows a two-stage strategy: he first considers the motive capacity in the case of the sublunary simple bodies and puts forward a paradigm to account for its ontological unity; then he extends, insofar as is possible, the same paradigm to the simple supralunary body. In both cases, as we will see, Avicenna elaborates his doctrine while facing the doubts of an anonymous opponent.

Concerning the ontological relation between the motive capacity and the form of the simple sublunary bodies, the gist of Avicenna's doctrine is based on the idea that their power to move toward their own natural place, either downward or upward, is ontologically posterior to the power that emanates directly from the essence of the body. Avicenna's claim relies on the assumption that one single principle cannot be the cause of one thing and of its contrary: if the body's power to move towards its natural place, which Avicenna calls here 'inclinatory power' (*al-quwwa al-mumila*), were to be identified with the form itself or emanated from it alone, then the form would be the cause of two contrary states, i.e. movement toward the natural place, and rest in it once the body has reached it.

In order to avoid this conclusion and to settle the relationship between the inclinatory power and the form, Avicenna considers an alternative: the inclinatory power is either chronologically posterior to the essential power and hence to the form, or is it simultaneous with it. His strategy will be to dismiss the first option and to sharpen up the second one:

«And it is possible that [from the unique simple nature] there emanates an inclinatory power in virtue of the body's place and a heating power in virtue of

the body's quality, the one being prior to the other. Therefore, the heating power precedes the inclinatory one, as what receives heat by accident leans upward. Otherwise the two are simultaneous, but the one is caused by the form by itself, as heat in the case of fire and coolness in the case of water, while the other one is caused by the form together with a supervening accident, as the inclination (*al-mayl*), when the body is accidentally separated from its natural place. Or they are simultaneous, while the cause is the form alone; but this is not possible. And you have already learnt before this place the difference between the form and these states. And you know from there that in the body, while staying in its natural place, there is no cause of its movement, as much as it is cause of its movement. For it is not the form alone that is cause, but its form and something. Actually, one single thing cannot be the cause of the movement toward the natural place and cause of the rest [in it]. And the doubt (*al-šakk*) some people (*ba ḏuhum*) raise is solved for you»⁶⁴.

Avicenna initially considers the first option, according to which the inclinatory power is chronologically posterior to the essential power and hence to the form. He does not reject it explicitly, but states that in this case the inclination toward the natural place is *stricto sensu* an accident that supervenes upon the body. In the case of elemental fire, for example, its upward inclination would be something that supervenes upon its form and is chronologically posterior to its active power, i.e. the power to heat. According to this option, therefore, fire comes to be, and then acquires its upward inclination as an accident.

He continues by considering the second possibility, according to which the inclinatory power is *chronologically* simultaneous to the essential power and, therefore, to the form. This — Avicenna argues — is true, but a specification must be added. The active power and the inclinatory power cannot be also *ontologically* simultaneous or, in other words, on the same ontological level; for the first one emanates from the unique nature of the body, while the second one cannot be caused by the form alone. Otherwise, as we have seen, the form would be the cause at the same time of movement toward the natural place and of rest in it. The cause of the body's inclination toward its natural place — Avicenna asserts — is its form *plus* an accident, namely, the fact that it is separated from its own natural place.

Thus, confirming the ontological framework of *Phys.*, I.6, Avicenna concludes that the inclinatory power is neither a form, nor an accident, but emanates from the formal principle when an accident is joined to it. By stating this, Avicenna can argue that only one act characterizes a simple body as such; this act is not to move towards its proper place, but to rest in it. This is what Avicenna

⁶⁴ AVICENNA, *DCM*, pp. 3, 17 - 4, 10.

means when he states that a form cannot be the cause of two opposite acts, i.e., movement toward the proper place and rest in that place. The form, as such, is the principle of the latter act and of the former only when the simple body is not in its proper place. As a consequence, the simple sublunary body is what it has to be when it is in its proper place, but it is already endowed with the corresponding power even when it is not in it. Fire, for example, already possesses the capacity to be in the upward region, even when it is on earth, since its capacity to be above does not follow from its form alone, but from its form and its location. Properly speaking, the natural movement of the simple sublunary body does not constitute its essential act, but the path leading to its ontological realization.

In accordance with these considerations, in chapter 2, Avicenna explains that simple sublunary bodies, when they are in their natural location, are neither heavy nor light. For a simple body is light or heavy when it has an inclination (*al-mayl*) to move upwards or downwards. When it is in its natural location, however, it does not possess any inclination in act⁶⁵. Accordingly, light and heavy cannot be the form of the simple body. Although they are not merely accidents of simple bodies, Avicenna makes clear that they occur accidentally when the matter becomes hot or cold⁶⁶.

At the end of the above-quoted passage, Avicenna states that this explanation enables us to eliminate the doubts 'someone' raises on this issue. He does not name the person he is referring to, nor does he outline the terms of the doubts. In an insightful presentation, A. Hasnaoui pointed out that, in the second chapter of the DCM, Avicenna formulates his doctrine of inclination as an answer to the objections raised by John Philoponus, without ever naming him⁶⁷. If this is the case for this passage too, Avicenna might be alluding to the objection Philoponus raises against the demonstration of the eternity of motion established by Aristotle in *Phys.*, VIII, 1.

According to the main assumption at the basis of Aristotle's argument, any movement whatsoever that we can suppose to be the first one is preceded by another movement and the mobile possessing the corresponding potency to move⁶⁸. Against this argument, in the sixth book of the *Contra Aristotelem*, Philoponus argues that elemental motion challenges this assumption of *Phys.*,

⁶⁵ *Ibid.*, p. 9, 7-8.

⁶⁶ *Ibid.*, p. 15, 1-4.

⁶⁷ In this presentation (see n. 53), A. Hasnaoui provided some results of his ongoing research on the Arabic reception of Philoponus and the essential role that the latter played in Islamic philosophical tradition. The importance of this research cannot be over-emphasized. On this issue, see his groundbreaking paper *Alexandre d'Aphrodise vs Jean Philopon. Notes sur quelques traités d'Alexandre "perdus" en grec, conservés en arabe*, « Arabic Sciences and Philosophy », 4, 1994, pp. 53-109.

⁶⁸ See fragment 109 (ed. WILDBERG), pp. 125-126; cf. SIMPLICIUS, *In Phys.*, pp. 1133, 16 - 1134, 29.

VIII, 1, since in its case the mobile and the corresponding potency to move do not pre-exist. In the case of fire, for example, the mobile that has the potency to move upward is fire itself, which did not exist before its own generation. As for its potency to move upward, it does not pre-exist either; since fire comes to be and immediately acquires the potency to move upward. In the case of elemental movement, thus, it is false that the mobile and the corresponding potency temporally pre-exist this motion. Elemental movement, therefore, constitutes an exception to Aristotle's assumption and a counterexample to his demonstration of the eternity of movement.

By switching from the notion of potency to that of power, and by assuming that the act of fire is not to *move* upwards, but to *be* upwards, Avicenna might try to avoid the aforementioned difficulty. In fact, if movement toward the natural place is ontologically posterior to the form, it can be considered as a sort of first actuality of the simple body, whose second actuality is rest in its natural place⁶⁹. Insofar as it is a first actuality, natural movement presupposes the pre-existence of a corresponding potency, which is not present in the fire but in what fire comes to be from. Avicenna, in other words, would be rebutting Philoponus' objection as Simplicius and al-Fārābī had done before him⁷⁰, namely by admitting that the capacity to move towards its natural place is a sort of second potentiality for the simple body, preceded by a first potentiality belonging to what the simple body comes to be from⁷¹.

It is undeniable that Philoponus' criticism of elemental motion shapes the larger polemical setting of Avicenna's doctrine. His attack against Aristotle's doctrine of natural movement clearly constitutes the background of Avicenna's

⁶⁹ On the doctrine of the double actuality in Alexander of Aphrodisias, Philoponus and Avicenna, see HASNAWI, *Alexandre d'Aphrodise vs. Jean Philopon* cit., and ID., *La définition du mouvement dans la Physique du Šifā' d'Avicenne*, « Arabic Sciences and Philosophy », 11, 2001, pp. 103-123.

⁷⁰ This hypothesis is confirmed by Averroes' *Long Commentary of Phys.*, I, 1. There, Averroes states that Avicenna interpreted *Phys.*, I, 1 as al-Fārābī did. On the debate concerning the meaning of *Phys.*, I, 1, see R. GLASNER, *Averroes' Physics: a Turning Point in Medieval Natural Philosophy*, Oxford University Press, Oxford 2010; C. CERAMI, *L'éternel par soi. Averroès contre al-Fārābī sur les enjeux épistémologiques de Phys. VIII 1*, dans P. BAKKER ed., *Averroes' Natural Philosophy and its Reception in the Latin West*, Leuven University Press, Leuven 2015, pp. 1-36.

⁷¹ This does not necessarily prove that Simplicius' commentary on *Phys.*, VIII was accessible to the Arabic readers of Aristotle (in favour of this hypothesis, see I. BODNAR, M. CHASE, M. SHARE, *Simplicius, On Aristotle's Physics 8.1-5*, Cornell University Press, Ithaca 2012; M. CHASE, *Philoponus' Cosmology in the Arabic Tradition*, « Recherches de Théologie et Philosophie médiévales », 79/2, 2012, pp. 271-306). As a matter of fact, Avicenna could have used al-Fārābī's treatise on *Changing beings*, which itself could rely on Alexander's commentary on *Phys. VIII* and its theory of *epheis* (in favor of this hypothesis, see CERAMI, *L'éternel par soi* cit. On Alexander notion of *epheis*, see M. RASHED, *Alexandre d'Aphrodise: Commentaire perdu à la Physique d'Aristote (Livres IV-VIII). Les scholies byzantines. Edition, traduction et commentaire*, De Gruyter, Berlin - New York 2011, pp. 140-150.

doctrine that natural movement does not stem directly from the form, and is in this sense farther removed from the ontological core of the simple body. Still, subsequent developments concerning the nature of the inclinatory power seem to suggest that there is also a more specific polemical background, established in a properly Arabic context. This becomes clear from the last lines of the first chapter and from the next one, in which Avicenna ascertains the unitary nature of the motive capacity and extends the same account to the celestial body. It is in these lines that Avicenna's Arabic background comes to light.

In order to ascertain the motive capacity's unitary nature and to elucidate its connection with the body it belongs to, Avicenna first establishes a causal link between the agent cause, the power and the act of a simple body. He declares that when the matter, the agent cause and the power are one, only one act can follow. Two acts with opposite ends cannot belong to a single and simple body. This — Avicenna asserts — is indisputable:

« And there must be no doubt concerning the impossibility of the realization of actions whose ends⁷² are opposite, when matter is one, power is one and the agent cause is one. For, you know that from a single power one single act proceeds and that a single natural act⁷³ cannot but proceed from a single power »⁷⁴.

The natural act of a simple body necessarily stems from a single unitary power, and, inversely, the motive power of a simple body cannot be at the origin of two opposite acts, as in the case of the upward and downward motions of a simple body. Fire, in virtue of its inclinatory power, cannot move upward *and* downward. Its only natural act is to move upwards, when it is outside its natural place.

Avicenna then specifies that this assumption does not mean that we cannot distinguish a generic and a specific aspect of this act and the corresponding power. On the contrary, the acts, like the powers of simple bodies, differ from one another with respect to their species and share a form of generic unity:

« Thus, if this natural act is one in genus, like the downwards movement of water and earth, these two movements are one in genus, but not in species, since they communicate and they differ by virtue of something essential to them. They share something, since they move from the region of air following the direction opposite to the sphere. They differ, since the end of each one of these two movements is not the same in species as the end of the other. And the power is one in genus, but not in species. For the power that is one in species reaches

⁷² Following the Teheran lithography, which transmits *al-muḥtalifāt al-ġāyāt*.

⁷³ Following again the Teheran lithography, which transmits *al-fī l*.

⁷⁴ AVICENNA, DCM, p. 4, 10-13.

an end that is one in species. And⁷⁵ when the natural act is one in species, an end that is one in species is reached. Furthermore, when the natural act is one in species, its principle is one in species. And if its principle is one in genus, the simple body that shares with it the species of this movement does not share the specific cause, but the generic cause, as well as the generic power, and it would differ by virtue of the addition of a differentia to its power. For this differentia either specifies the power's act or does it not. If it specifies it, there is no sharing of the act's species; if it does not specify it, this addition would not be one of the power's differentiae, insofar as it is a power, implying a predication in the power, but something accidental not a [real] differentia»⁷⁶.

As in the previous lines, Avicenna maintains that there is a causal link between the principle, the power, and the act of a simple body. On this basis, he confirms that we can infer the unitary nature of the principle and the bodily power from the unitary nature of the act. He adds, however, that this unity can be either specific or generic. Thus, from the fact that two acts belong to the same genus, we can infer that the corresponding powers and principles share the same genus, but not that they are also absolutely identical, i.e. the same according to species as well. Two movements that apparently have the same end, as for example the movement of water and of earth toward the centre of the cosmos, are only generically the same. For their ends are not exactly, i.e. specifically, the same: water ends its course on the surface of the earth, while earth does not stop until it arrives at the centre of the cosmos.

Two assumptions therefore support Avicenna's conception: 1) the unitary nature of the principle and of the power of a simple body can be inferred from the unitary nature of its natural movement; 2) natural movements have species and genus; the species of the natural movement is determined by its end-point, while its genus is defined by its path. By making these assumptions, Avicenna can conclude that one and only one unitary power corresponds to each simple body; for each natural movement is essentially determined by the natural location of each simple body, just as we can infer the existence of a corresponding unitary power from the unitary character of each natural movement.

This is the conclusion Avicenna finally draws. The entire argument and its two assumptions reveal Avicenna's ultimate purpose, as well as the source of his development. In fact, the idea that the natural movements of the simple bodies have a genus and a species, like the idea that the proper location of the simple sublunary bodies defines the species of their natural movement, constitute the primary tools which al-Fārābī uses to dismiss Philoponus' refutation of

⁷⁵ Following the Teheran lithography, which transmits *wa*.

⁷⁶ AVICENNA, *DCM*, pp. 4, 13 - 5, 7.

the special nature of the celestial body. In this case too, let us briefly recall the Aristotelian argument at issue, as well as Philoponus' criticisms, and then go on to consider al-Fārābī's reaction to Philoponus.

Aristotle demonstrates the incorruptibility of the fifth element in *DC* I, 2-4. The main argument supporting this tenet is based on the assumption of a one-to-one correspondence between the simple movements and the five simple bodies. Aristotle argues that there are only three simple movements: rectilinear (downward and upward) and circular⁷⁷. He maintains that to each simple movement must correspond just one simple body, and infers that only a fifth simple body could be characterized by circular movement, since the four sublunary bodies move by nature either downward or upward. He concludes that this fifth body is incorruptible, since the circular movement has no contraries and cannot have a beginning or an end.

As for the doctrine of the eternity of movement, Philoponus' strategy for dismissing Aristotle's argument consists in pointing out an exception to one of its assumptions. This assumption is precisely the one-to-one correspondence between simple bodies and simple natural movements. Philoponus retorts that this correspondence is refuted by the very fact that two simple bodies can share the same movement. Air and fire, for example, move by nature upward, as earth and water move by nature downward. The one-to-one correspondence is thus rebutted, and so is Aristotle's entire demonstration⁷⁸.

Al-Fārābī reacts against Philoponus' attack in his *Against John the Grammarian* (*al-radd 'alā Yahyā al-naḥwī*)⁷⁹. He dismisses Philoponus' objection by arguing that the movement of air and fire is not, strictly speaking, the same kind of movement. In fact, although the two bodies are directed towards the upper region of the cosmos, their movements differ in species, insofar as they are oriented towards two different places of this region. The two movements, in this sense, differ from one another because of the diversity of their end-points:

« What [Philoponus] has said about air and fire, and earth and water — that their movement is one in species — is false. The case is not as he states. For the place of water is different from the place of earth, and, similarly, the place of air is different from the place of fire. Movement is one in species only when the end

⁷⁷ The existence of these two simple movements is inferred from the existence of two simple lines: the straight line and the circular line.

⁷⁸ SIMPLICIUS, *In DC*, p. 26 and ff.

⁷⁹ For the Arabic text, see M. MAHDI, *The Arabic Text of Alfarabi's Against John the Grammarian*, in S. A. HANNA ed., *Medieval and Middle Eastern Studies in Honor of Aziz Suryal Atiya*, Brill, Leiden 1972, pp. 268-284. For a study of this text and an English translation, see ID., *Alfarabi against Philoponus*, «Journal of Near Eastern Studies», 26, 1967, pp. 233-260.

pertaining to place is an end that is one in species and when the place pertaining to both [elements] is one in species. If, however, the place of water and of earth is not one in species, then their movements are not one in species. Similarly, the place of air and of fire are different in species, therefore their movements are different in species»⁸⁰.

In the following lines, al-Fārābī states even more explicitly that the end-point of a natural movement, identified with a specific region of the cosmos, constitutes a part of the definition of natural movement:

«[T]he essence of movement is [constituted] by the thing that takes place through the movement and by the goal at which what moves arrives by its movement. The same is true of the argument concerning fire and air. For the two places to which they move differ in species; one may be deceived about them only because when they move away from the place of earth they traverse a certain distance together»⁸¹.

Al-Fārābī's riposte to Philoponus is thus based on the idea that the direction of natural movement can only determine its genus, but not its species. It is the limit of a natural movement, i.e. the natural place of each element, that determines its species. The upward movements of fire and air are generically one, but not specifically the same, since they are specified by their respective end-points. The one-to-one correspondence between simple natural movements and simple bodies is thus secured, and so is Aristotle's entire demonstration of the special nature of the fifth body⁸².

This very same idea, as we have seen, is behind Avicenna's doctrine stating that the natural movement of each simple body, as its inclinatory power, displays a generic and a specific aspect. From this, and beyond what al-Fārābī advocates,

⁸⁰ MAHDI, *Alfarabi against Philoponus* cit., p. 259; Arabic text in Id., *The Arabic text of Alfarabi's* cit., p. 283.

⁸¹ MAHDI, *Alfarabi against Philoponus* cit., p. 260; Arabic text in Id., *The Arabic text of Alfarabi's* cit., p. 284.

⁸² It would be mistaken to assume that al-Fārābī's refutation of Philoponus' counterarguments is *ipso facto* a demonstration of the eternity of the world and that, according to him, Aristotle's aim in the *DC* is to establish the eternity of the world. As a good Aristotelian, al-Fārābī is very well aware that Aristotle does not demonstrate the eternity of the world in the *DC*, but the special nature of the fifth body (i.e. the fact that it moves by nature in a circle, and therefore that it does not possess heaviness or lightness, and that it is ungenerated, indestructible, and exempt from increase and alteration). Still, al-Fārābī's refutation of Philoponus is not simply a dialectical exercise, but one step in a larger argument. The very complicated issues of how the eternity of the world can be demonstrated according to Arabic thinkers, and if and how they were able to reconcile the theory of aether with that of the divine creation of the heavens do not pertain to the present study. For an overview of the first issue, see C. CERAMI, *The Eternity of the World*, in R. TAYLOR, L. LOPEZ FARJAT eds., *The*

Avicenna concludes that the powers of the simple bodies are generically one, but specifically different. In chapter 1, he does not explicitly adopt this device against Philoponus and his followers. This, however, is more clearly carried out in the following chapter. In chap. 2, in fact, Avicenna pursues the study of simple primary powers. He confirms the need to distinguish between a generic and specific aspect of natural movements and of simple powers, and extends this same scheme to circular movement⁸³.

Applying the framework established in chap. 1 to circular celestial movements, Avicenna claims that, in the case of these motions too, we can distinguish a generic and a specific aspect. Circular motions with different orientations and different locations must be regarded as generically the same, but specifically different:

«The bodies that have in their natures a circular inclination are either many or one. For they constitute a genus opposite by nature to [that of] bodies moving by nature in a rectilinear way, just as you have realized from the previous explanations. However, if [these bodies] require in addition a different natural place and a different directions in motion, it is appropriate that they differ in species»⁸⁴.

Avicenna states plainly that there is one genus for circular celestial motions, according to which they all differ from rectilinear motions, and several species, determined by the movements' different inclinations. The same scheme is thus operative in sublunary and in supralunary natural movements. Circular motions (and the corresponding powers) share the same genus, but differ from each other (like their corresponding powers) in their species.

As in chap. 1, Avicenna affirms here that the distinction of one genus and several species of circular motions enables the objection of an anonymous opponent to be rejected. The opponent's criticism is not addressed directly against the Aristotelian doctrine, but against those who infer the diversity of the nature of the four simple bodies from the diversity of their movements. It consists in accusing them of not also having inferred the different nature of the celestial bodies from the different celestial movements. According to the opponent, in other words, it is not consistent to assume that there are four

Routledge Companion in Arabic Philosophy, Routledge, New York 2016, pp. 141-155, where the relevant literature is quoted. Concerning the second issue, see M. CHASE, *Creation in Islam from the Qur'ān to al-Fārābī*, *ibid.*, pp. 248-260, with bibliography. On al-Fārābī's position in particular, see D. JANOS, *Method, Structure, and Development in al-Fārābī's Cosmology*, Brill, Leiden - Boston 2012.

⁸³ Cf. AVICENNA, *Physics*, III. 13-14. Avicenna has already pointed out that three genera of natural motions are to be posited: the genus of what moves *from* the middle, the genus of what moves *towards* the middle and the genus of what moves *around* the middle. Here, however, he maintains that there are several species in each of these genera.

⁸⁴ AVICENNA, *DCM*, p. 12, 4-7.

sublunary simple bodies which, like their simple movements, are generically the same and specifically different, but not to assume the same for the fifth body. In fact, since there are several celestial movements, why not admit that there are also several celestial natures, instead of a single fifth one?

«Thus, [bodies] moving toward the middle (*al-wasaṭ*) constitute one genus, while those moving from the middle constitute another genus differing from the first one. However, if they are in addition different in nature, so that one requires some natural place above or below the other, and one moves farther away while another approaches, and one maintains its own inclination while the other loses it, and this belongs to them by nature, then these [bodies] differ in species by nature. This therefore eliminates the [supposed] inconsistency of the one who claims: “why did you all postulate (*awğabtum*) a difference in the natures of the bodies in virtue of a difference in their movements, and then make (*ǧa’altum*) the spheres one single fifth nature”? The fact is that we do not make it (*lam nağ’alhā*) one in species »⁸⁵.

The adversary’s attack is not fully developed, but its main tenet becomes clear in the light of Avicenna’s analysis. According to the opponent, it is nonsensical to assume the genus/species distinction for the sublunary natural movements but not for the supralunary ones and, hence, it is also inconsistent to infer on the basis of this argument the existence of one special celestial nature. For according to the one-to-one correspondence between movement and nature and the motion’s genus/species distinction, one should assume that there are just as many celestial natures as circular movements, and not just one single fifth nature.

What is at issue, then, is the one-to-one correspondence between simple movements and simple bodies, and the existence of a fifth ‘special’ nature. The ultimate target of the criticism, however, is not Aristotle, but al-Fārābī. It is not Aristotle’s original argument that is under attack, but al-Fārābī’s answer to Philoponus, stating that the sublunary simple movements are the same according to their genus, but different according to their species. It is this thesis that the opponent accuses of inconsistency, and against it that he concludes that it is absurd to infer from it the existence of one single fifth nature. This is clear from Avicenna’s answer; since he tells us that it is in order to dismiss this objection that he extends the genus/species distinction to the celestial movements, and claims that there are several species of celestial movements, but one single genus for them all. The one-to-one correspondence is therefore secured, and hence the existence of a special kind of simple body. By adapting al-Fārābī’s scheme to the celestial movements, in fact, Avicenna can conclude that there is still *one* single fifth nature, even if it is one *in genus*, while different *in species*.

⁸⁵ *Ibid.*, p. 12, 11-16.

According to this reconstruction, therefore, we can conclude that, even if the objection is clearly a result of Philoponus' criticism against Aristotle, it was necessarily raised after the composition of al-Fārābī's treatise. In fact, the genus/species distinction is not attacked in any of Philoponus' criticisms, simply because this is al-Fārābī's new argument. In this sense, it is not incongruous to speak of a neo-Philoponian critic.

Before trying to provide a more specific profile of this neo-Philoponian opponent, and in order to underline the significance of Avicenna's development, some remarks are needed. First of all, by claiming that «we do not make [the celestial spheres] one in species», Avicenna places himself in a single lineage that goes back to Aristotle through al-Fārābī. This is true not merely because he makes al-Fārābī's thesis his own, but more importantly because he implements it and uses it, as did al-Fārābī, against an opponent of Aristotle's doctrine. Secondly, as in the case of the sublunary natural movements, Avicenna goes beyond what al-Fārābī explicitly states. In fact, he infers from the existence of several circular movements, which are specifically different but generically the same, the existence of several natures and several powers, which are specifically different but generically the same. This is the ultimate conclusion of the regressive argument Avicenna puts forward: celestial bodies and their corresponding powers belong to some single fifth nature, but only according to their genus, since according to their species, each one of them constitutes one single nature and possesses one single power. Thus, as in the case of the sublunary simple bodies, Avicenna can conclude that one unitary specific power belongs to one single celestial body, but he can also conclude that this celestial nature is a fifth nature, i.e. generically different from the sublunary one.

In the wake of Aristotle's *DC*, therefore, the second chapter of the *DCM* finally proves that the nature of the celestial body is different from the natures of the sublunary ones. However, Avicenna's strategy consists in considering, as far as possible, the five simple bodies from one single perspective, i.e. with respect to their simple power. The entire chapter, if not the *DCM* as a whole, thus shows that Avicenna's project lies halfway between the intention of setting up a unitary framework for all simple bodies and a strong anti-Philoponian concern.

Another passage of Avicenna's work confirms this hypothesis and provides supplementary evidences about his opponent. Here too, Avicenna strives to maintain Aristotle's cosmological underpinnings, while taking into account the new potentially threatening theories. In this case too, what is at stake is the existence of natural movements that remain in a one-to-one correspondence to simple bodies and, hence, the existence of a fifth simple nature.

After having admitted in the first chapter the genus/species distinction in the motive powers, Avicenna admits, as does Aristotle, that natural movements,

in a cosmological perspective, are defined by a fixed coordinate system⁸⁶. Simple bodies moving naturally in a rectilinear way move towards or away from the centre of the universe (*al-wasaf*), while bodies moving naturally in a circular way revolve around this same centre. In the same context, however, Avicenna also endorses Ptolemy's models of epicycles and eccentrics, and specifies that not all celestial movements have the centre of the universe as their centre⁸⁷. In order to maintain these *a priori* opposed astronomical theses, Avicenna follows the same strategy brought to light earlier: as far as possible, he extends the framework used to account for natural rectilinear motions to celestial movements.

First, Avicenna claims that we can admit that two simple bodies, water and earth for example, move towards the centre of the universe, even if only one of them reaches it:

«Let it be known⁸⁸ that what moves from the middle need not inevitably move from the very middle (*min 'ayn al-wasaf*) only. For if it moves from another place, while moving by its movement farther away from the middle, it nevertheless moves away from⁸⁹ the middle⁹⁰. Likewise, what moves toward the middle is not that which by its movement inevitably terminates at the very middle, for even if by its movement it [only] approaches⁹¹ the middle [without reaching it], it is something that moves toward the middle. Indeed, not everything that moves towards something, reaches [it]⁹² »⁹³.

Water actually moves towards the centre of the universe, even if the latter is not its end-point, but is instead the end-point of the movement of earth. According to al-Fārābī's scheme, in fact, the movements of water and earth are specifically different, although, as rectilinear natural movements, they all share the same genus.

Avicenna then explains that in an analogous way, we can admit that a celestial body revolves around the centre of the universe, even if the latter is not the centre of its circular path:

⁸⁶ *Ibid.* p. 2, 5-7.

⁸⁷ I wish to thank A. Hasnaoui and J. McGinnis for having shared their respective translation of the following passage. Any possible mistake is mine.

⁸⁸ Following the Teheran lithography, which transmits *fa-l-yu lam*.

⁸⁹ Following the Teheran lithography, the manuscript Bibl. Nac. 5008 and the Latin translation, which transmit *'an al-wasaf*.

⁹⁰ If fire, for example, which moves by nature away from the centre of the universe, starts its upward movement in the region of air and not on earth, it nevertheless moves 'away from the middle'.

⁹¹ Following the Teheran lithography, the manuscript Bibl. Nac. 5008 and the Latin translation, which transmit *in kāna*.

⁹² Water, for example, 'moves toward the middle', even if its natural place, namely, the place where its movement stops, is not the very centre of the universe.

⁹³ AVICENNA, *DCM*, p. 6, 8-14.

«As for what moves around the middle, the middle need not inevitably be its centre (*markaz*)⁹⁴. For even if [the middle] is not the centre [of its circular movement], but is inside it, then this [body] is something that moves around the middle, since it moves in a way about it (*hawlahū*); with the exception of one [body] in particular among those that move around the middle, namely⁹⁵, the one which delimits the whole, since [in this case] the middle is its centre⁹⁶. As for what is other than that one [body], the centre of the circular body moving around the middle may not be the middle of the movement of the body moving toward the middle and from the middle⁹⁷. [This centre] is thus not that with respect to which is determined the middle which makes the natural directions for rectilinear movements»⁹⁸.

By distinguishing the geometrical notion of centre (*markaz*) from the physical notion of centre of the universe, i.e. 'middle' (*wasat*), Avicenna can claim that a planet revolving around the centre of an epicycle does not have the centre of the universe as the centre of its movement, but that it still moves about it (*hawlahū*). Since the epicycle's centre moves along a deferent, which contains the centre of the universe, the planet itself can be said to move around the centre of the universe, for following the path of the deferent, the planet sometimes comes closer to and sometimes moves farther away from this centre. In this sense, we can say that it moves about it. The only body that necessarily has the centre of the universe as its proper centre, Avicenna concludes, is the last sphere.

Avicenna adds that this consideration must not lead to the conclusion that the planet moving along the epicycle moves towards or away from the centre of the universe as the simple sublunary bodies do. For, Avicenna claims, the planet does not tend *essentially* towards that proximity or remoteness:

«If what moves moves about (*hawla*) this middle, while the latter is not its centre, it happens to [this body] to be sometimes closer to it, sometimes farther away from it. This, however, is not because [the body] moves toward the middle or away from the middle, since it does not essentially tend by its movement toward this proximity and remoteness. Rather, it simply moves and is on its orbit, yet one part of its orbit happens to be nearer to the abovementioned middle and one part is farther, just as the parts [of] its orbit are near to or far from a potentially

⁹⁴ I.e., the centre of its circular movement.

⁹⁵ Following the Teheran lithography, which transmits *wahāda*.

⁹⁶ The last sphere has necessarily the centre of the universe as the centre of its circular movement.

⁹⁷ I.e., the centre of all celestial concentric spheres, as well as of the four sublunary bodies, which move toward and from the centre of the universe in the above-mentioned way.

⁹⁸ AVICENNA, DCM, pp. 6, 13 - 7, 3.

almost infinite number of [other] things, while it does not move towards them by primary intention. On the contrary, the primary intention with respect to its movement is the preservation of its orbit, [which] then entails this [other phenomenon]. And if that happened by primary intention, [the body] would stop once it reached what was intended and never depart from it, but it would move toward it from the nearest distance, namely, the straight line, not along a deviation. However, this proximity and this remoteness are not accidental to the whole of what moves around the middle [...]»⁹⁹.

Avicenna manages to reconcile the Aristotelian and Ptolemaic astronomy by appealing to the distinction between primary and secondary intention. The planet's getting closer to the centre of the universe does not constitute its primary goal; it is not the result of a primary intention. If this were the case, when it arrived at the closest distance from that centre, the planet would reach it following the shortest path, namely the straight line, and never depart from it. Still, Avicenna concludes, this getting closer is not purely accidental either, at least as far as the whole movement is concerned.

Although Avicenna's explanation is based more on an analogy than on an identity, his strategy is the same as in the previous argument: the same scheme applies to natural rectilinear movement as to natural circular motion. The centre of the universe is always the point of reference for both kinds of motion, i.e. rectilinear and circular natural motions, either in a primary or in a secondary sense. In the case of earth's downwards motion, as in the case of the last sphere's circular movement, the centre of the universe is the primary point of reference; while in the case of water's downward movement, as in the case of the planet's circular movement along the deferent, the centre of the universe is only secondarily the point of reference.

In the case of this argument too, Avicenna makes clear that the doctrine at issue is attacked by some people who seem to object that circular celestial movements are real movements toward and away from the centre of the universe:

«If that is the case and there is neither something distinct that moves¹⁰⁰ nor a movement that is by itself toward some direction which the body would move to¹⁰¹ by primary intention, how would there be a real movement toward the middle or from the middle, to the point that some of those near to the Christian community

⁹⁹ AVICENNA, *DCM*, p. 7, 3-12.

¹⁰⁰ Following the Teheran lithography, the manuscript Bibl. Nac. 5008 and the Latin translation which seems to transmit *mutamayyizun*.

¹⁰¹ Following the Teheran lithography.

(ba 'du al-mutaqarribīna ilā al- 'āmmati min al-naṣārā)¹⁰² could reckon it as foolish, while being conscious »¹⁰³.

The opponent's doubt is considerably abridged, but here too its main tenet is clear from the context of Avicenna's presentation. By questioning the universality of the homocentric system, the Ptolemaic discoveries contribute new arguments against Aristotle's cosmology. If the centre of the universe is no longer the absolute point of reference of the circular celestial movements, the very existence of a natural downwards/upwards movement, like that of a natural circular motion around the centre and, hence, the existence of a fifth special nature, are also unreasonable. Integrated within the new scientific context, this criticism thus constitutes another piece of evidence substantiating the existence of a neo-Philoponian opponent. The objection, in fact, only applies if we admit the Ptolemaic astronomical model.

At the end of the passage, Avicenna provides supplementary information about the anonymous opponent. In reaction to this latter's criticism, Avicenna seems to reply that the opponent himself acknowledges that his objection is not decisive, while scoffing at Aristotle's doctrine. In so doing, Avicenna accuses his opponent of adopting a polemical posture; for the latter knows how to escape his own objection and decides, notwithstanding, to attack Aristotle's doctrine. It is not easy to understand what, according to Avicenna, the opponent is aware of. It is not unlikely that Avicenna is alluding to the solution he has just offered, according to which the model of deferents and epicycles still ensured a real form of homocentric cosmology. Be that as it may, Avicenna's riposte provides further unambiguous data concerning the identity of his opponent. By claiming that the opponent is part of a group of people « near to the Christian community », Avicenna provides two essential pieces of information. First of all, we can exclude that Avicenna is alluding to Philoponus, since this latter was not just 'near' the Christian community, but a full member of it. Likewise, we can infer that Avicenna's opponent belongs to the Arabic cultural *milieu* and that he was probably one of his contemporaries.

Another objection, which Avicenna quotes literally in chap. 5, lends weight to this hypothesis¹⁰⁴. Avicenna tackles it while studying the disposition of the stars. This time the anonymous' criticism is addressed directly against the 'Peripatetics'. It consists in a clearer reformulation of Philoponus' argument to

¹⁰² Or less plausibly « some Christians near to the crowd ».

¹⁰³ AVICENNA, DCM, p. 7, 15-17. Or alternatively « but this is something well known », reading *wa-huwa yuṣ'iru*. I wish to thank Michael Chase for this suggestion.

¹⁰⁴ *Ibid.*, pp. 38, 17 - 41, 7.

the effect that the visible nature of the celestial bodies necessarily implies their tangible nature¹⁰⁵. The author rephrases Philoponus' argument, by deploying the formal analogy supporting it: «sight is to touch what the object of sight is to the object of touch». Setting aside the detail of Avicenna's reply, what is worth noting for us is that in this case, as in the previous criticism, Avicenna reproaches his opponent for his two-faced posture:

«What we say in response to this spurious fallacy, which its author has doubtless decided to take over arbitrarily, is as follows [...]» (transl. M. Rashed)¹⁰⁶.

Avicenna implies that his opponent acknowledges that Philoponus' objection is groundless, but that he deliberately consents to it. These are sufficient elements to assign this objection if not to the same author, then at least, to the same philosophical tendency.

Bringing together all the evidence gathered so far, and even if the identification of Avicenna's opponent demands further research, we can provisionally conclude that the latter was an Arabic thinker active not before the first half of the 10th century. Indeed, the first objection examined shows that the opponent presupposed the solution provided in al-Fārābī's treatise *Against John the Grammarian*, while the second one suggests that he was either a Muslim or a Christian member of the Arabic cultural community. Furthermore, the quite severe tone of Avicenna's answers suggests that he was one of his contemporaries.

Taken together, these data allow us to rule out some names and to point to some others as possible candidates. Among the Arab critics of Aristotle's doctrine, we know from al-Qiftī¹⁰⁷ that Abū Hāšim al-Ğubbā'i composed a work against Aristotle's *DC*. Although it is possible that Abū Hāšim was acquainted with al-Fārābī's response to Philoponus and that Avicenna had still access to his work, it is highly implausible that Avicenna should describe him as someone near to the Christian community. Among Avicenna's well-known polemical targets, Abū Bakr al-Rāzī could also be a possible candidate. Avicenna attacks him by name several times, notably in the context of the discussion of Aristotle's doctrine of the eternity of the world. The above examined objections, though, suppose a keener interest in Aristotle's *DC* that does not fit well with al-Rāzī's intellectual posture.

If we consider Avicenna's contemporaries who directly tackled the *DC* with an anti-Aristotelian attitude, two other names emerge as more plausible: Abū

¹⁰⁵ On this argument, see RASHED, *The Problem of the Composition* cit., p. 41 and ff.

¹⁰⁶ AVICENNA, *DCM*, p. 39, 7-8.

¹⁰⁷ IBN AL-QIFTĪ, *Ta'riḥ al-ḥukamā'*, p. 40.

Rayḥān Muḥammad ibn Aḥmad al-Bīrūnī and Abū al-Faraġ 'Abd Allāh ibn al-Ṭayyib. Let us consider the elements supporting the identification of Avicenna's opponent with either the former or the latter.

The famous correspondence between Avicenna and al-Bīrūnī attests to a fervent debate between the two thinkers on issues pertaining to Aristotle's *DC*¹⁰⁸. We are aware of two sets of questions that al-Bīrūnī addressed to Avicenna (ten grouped in a first set, eight in a second one). We do not possess the original version of al-Bīrūnī's questions, but Avicenna's summary, as well as Abū Sa'īd Aḥmad ibn 'Alī al-Ma'sūmī's summary of al-Bīrūnī's replies, can provide a reliable picture of his standpoint.

In the introductory lines of his first answers, Avicenna informs us that al-Bīrūnī asked him to elucidate some of Aristotle's statements in the *al-Samā' wa-l-'ālam*, which al-Bīrūnī himself found 'problematic'¹⁰⁹. Far from asking for a merely exegetical explanation, al-Bīrūnī provides doubts on Aristotle's doctrine by appealing to more or less fundamental objections. In several of them, he harshly criticizes Aristotle, but also upholds some of his tenets and confesses his admiration for his insight. In Avicenna's reformulation, none of al-Bīrūnī's criticisms perfectly matches the objections faced in the *DCM*. Nevertheless, Avicenna's answers as well as al-Bīrūnī's responses summarized by al-Ma'sūmī, contain some elements that bring these objections close to those of the *DCM*. A detailed examination of this outstanding text is beyond the limits of the present paper. I will limit myself to pinpointing these elements of resemblance and consider to what extent they shed light on the *DCM*'s polemical background.

Among the eighteen questions addressed to Avicenna, four are particularly interesting for our purpose: the first two of the first set, pertaining to the absence of heaviness and lightness in the celestial body and to its eternity respectively, the fifth one of the first set, pertaining to the uniqueness of the world, and the second one of the second series, concerning the natural character of the movements of the simple sublunary bodies.

In the first question, al-Bīrūnī asks Avicenna why Aristotle asserted (*awġaba*) that the heavenly bodies have neither lightness nor heaviness, and why he denied that heavenly bodies move toward and away from the centre¹¹⁰. In

¹⁰⁸ AL-BIRUNI AND IBN SINA, *Al-As'ilah wa'l-Ajwibah (Questions and Answers)*. Including the further answers of al-Bīrūnī and al-Ma'sūmī's defense of Ibn Sīnā, eds. S. H. NASR, M. MOHAGHEGH, High Council of Culture and Art, Tehran 1352Sh/1974 (hereafter *AVICENNA-BIRUNI, Questions and Answers*). English translation in R. BERJAK, M. IQBAL, *Ibn Sīnā-al-Bīrūnī Correspondence*, « Islam & Science », 1/1, 2003, pp. 91-98, 1/2, pp. 253-260; *ibid.*, 2/1, 2004, pp. 57-62, 2/2, pp. 181-187; *ibid.*, 3/1, 2005, pp. 57-62, 3/2, pp. 166-170; *ibid.*, 4/2, 2006, pp. 165-172; *ibid.*, 5/1, 2007, pp. 53-60.

¹⁰⁹ *AVICENNA-BIRUNI, Questions and Answers*, p. 1, 8-10.

¹¹⁰ *Ibid.*, p. 2, 5-6.

spelling out his question, al-Bīrūnī first objects that the absence of movement toward and away from the centre in the celestial bodies is not due to the fact that they are neither light nor heavy, as Aristotle's statements seem to imply. He then provides his own explanation: the celestial body does not move *away from* the centre of the universe because there is no place outside the cosmos, and it does not move *toward* this same centre, because its parts are interconnected. In this sense, contrary to what Aristotle states, nothing prevents us from admitting that the celestial body is the 'lightest' body¹¹¹.

Avicenna solves al-Bīrūnī's first difficulty by appealing to the doctrine previously examined in the DCM, according to which a body is light only when it is not in its natural place. He first states that if the celestial body were light, it would not be in its natural place; for a body is defined as light in act when it moves *towards* its natural place and not when it is *in* it. He then argues that the celestial body is not in its natural place anywhere else than where it is, and concludes, therefore, that the celestial body is not light in act¹¹². Clearly enough, then, the claim that inclination does not belong actually to the simple body in its final state, presented in the DCM as solving 'someone's' doubts, is here explicitly used to respond to al-Bīrūnī's question. This fact does not disprove that Avicenna's doctrine targets eventually Philoponus' criticisms, but it highlights the existence of a supplementary level of discussion within this same polemical background.

In the second question, alluding to DCI, 10 and II, 1, al-Bīrūnī asks Avicenna why Aristotle considered his predecessors' testimonies concerning the immutability of the heavens to be a strong argument for its perpetuity. The question aims ultimately at challenging the eternity of the universe. Al-Bīrūnī contests that ancient testimonies are not reliable on this point, and implies that claiming the contrary is nothing but sophistry¹¹³.

In answering this question, Avicenna first makes clear that the appeal to the ancient testimonies is part of Aristotle's dialectical strategy, and that it does not constitute his real argument in favour of the eternity of the cosmos. He then blames al-Bīrūnī for raising an objection similar to those raised by Philoponus, ignoring the fact that the latter actually agrees with Aristotle on this point, as his commentaries testify¹¹⁴. He concludes his answer by harshly condemning al-Bīrūnī's violent stance against Aristotle¹¹⁵.

¹¹¹ *Ibid.*, pp. 2, 6 - 3, 7.

¹¹² *Ibid.*, pp. 3, 8 - 5, 9.

¹¹³ AVICENNA-BİRÜNİ, *Questions and Answers*, pp. 12, 7 - 13, 1.

¹¹⁴ It is worth noting that Avicenna here mentions Philoponus' commentary on Aristotle's GC. On Avicenna's idea that Philoponus does not really wish to criticize Aristotle, cf. al-Ma' şūmī reply to al-Bīrūnī's objection *ibid.*, pp. 69, 12 - 70, 5.

¹¹⁵ *Ibid.*, p. 13, 7-10.

The overall tone of Avicenna's answer, thus, attests a certain agreement between the criticisms by al-Bīrūnī and Philoponus. Al-Bīrūnī's reply goes in the same direction, insofar as it attests both his acquaintance with Philoponus' texts, in all probability the *Contra Proclum* and the *Contra Aristotelem*, and his commitment to a critical stance against Aristotle. Al-Bīrūnī replies, in fact, that it is not Philoponus who should be accused of taking a two-faced stance, as Avicenna implies, but Aristotle. He then recommends that Avicenna make a closer study of Philoponus' personal treatises, notably the *Contra Proclum* and the *Contra Aristotle*, and not just his commentaries on Aristotle's books¹¹⁶.

The fifth question provides supplementary elements concerning al-Bīrūnī's rejection of Aristotle's theory of elemental natural movement. What it at issue is the idea that there is only one world, whether made up of the same simple bodies as our present world or of different natures. Al-Bīrūnī warns that this assumption, as well as Aristotle's claim that any supposed different world must be constituted by simple bodies of the same kind, put God's absolute power into question. This is clear from his reply to Avicenna's answer, where al-Bīrūnī states that if Avicenna is not willing to admit that God can create two separate worlds with distinct centres and peripheries, he is not willing to assume that the movements from the centre and toward the periphery are distinct movements belonging to only one genus (*ǧins*). He ends his reply by granting that his opinion can be assimilated on this point to the Basrians' opinion, which, as he attests, Avicenna defined as a Sophism¹¹⁷.

The second question of the second set attests the same critical assessment of Aristotle's theory of natural movements and proves that al-Bīrūnī's doubts echo difficulties embedded in a larger polemical context. Al-Bīrūnī asks Avicenna whether the doctrine of 'the person' asserting that all simple sublunary elements move downward is more reliable than the doctrine defended by Aristotle that fire and air move upwards while water and earth move downward¹¹⁸.

Avicenna answers that the case of fire invalidates this person's assumption. As such, fire cannot be said to moving *toward* the centre, because it never reaches it. In fact, only a body that reaches a certain end moves, strictly speaking, toward it¹¹⁹.

Against Avicenna's opinion, al-Bīrūnī espouses the first doctrine. He relates that, once he had received Avicenna's answer, he questioned the author of doctrine as to how to reply. The latter, according to al-Bīrūnī, confirmed against Aristotle's model that all bodies move toward the centre, and explained that the reason why

¹¹⁶ *Ibid.*, pp. 51, 13 - 52, 10.

¹¹⁷ *Ibid.*, pp. 57, 17 - 58, 8.

¹¹⁸ *Ibid.*, pp. 38, 12 - 39, 2.

¹¹⁹ *Ibid.*, pp. 39, 3 - 40, 5.

some elements, such as fire, do not reach the centre, although they move toward it, is that they are hindered by others that occupy the inner region¹²⁰.

All four of al-Bīrūnī's questions thus attest the existence of a heated debate concerning Aristotle's doctrine of elemental natural movement. They also show that Avicenna uses the doctrines provided in the DCM to oppose an anti-Aristotelian Arabic tendency that he assimilates to Philoponus' criticism. Furthermore, although Avicenna shows great respect for al-Bīrūnī, he does not hesitate to blame him for questioning Aristotle's doctrine and for raising objections comparable to those of Philoponus. Finally, the earlier date of the correspondence with al-Bīrūnī¹²¹ fits with the possibility that Avicenna was already aware of these criticisms while composing the DCM.

All these elements make it rather likely that al-Bīrūnī was one of Avicenna's interlocutors in the DCM. However, the fierceness of Avicenna's replies, as well as the indication of the opponent's proximity to the Christian community leave the possibility open that Abū al-Farağ ibn al-Tayyib was also a target in the DCM. Several sources dating to the last years of Avicenna's life document the contempt he displayed for Ibn al-Tayyib and, more generally, for the Christian philosophical community of Baghdad. Two texts in particular provide information that can support this hypothesis: a letter that Avicenna addressed to Abū Ja'far Muḥammad Ibn Ḥusayn al-Kiyā¹²² and a letter from one of Avicenna's disciples in Rayy addressed to an anonymous ṣayḥ in Iraq¹²³.

In the first text, in reply to al-Kiyā, Avicenna agrees with him that Aristotle's doctrines, notably about intellect and soul, puzzled their readers and that this hesitation and obtuseness are particularly evident among the «simple-minded Christians» of Bagdad. He then considers Philoponus' stance and makes reference to the latter's «book on the refutation of Aristotle¹²⁴». He judges it to be only

¹²⁰ *Ibid.* pp. 77, 12 - 80, 2.

¹²¹ D. GUTAS, *Avicenna and the Aristotelian Tradition*, Introduction to Reading Avicenna's Philosophical Works. Second, Revised and Enlarged Edition, Including an Inventory of Avicenna's Authentic Works, Brill, 2014, pp. 97-98; 289-290.

¹²² The letter, in the version transmitted in the Cairo MS Dār al-Kutub, Ḥikma 6 M, is published in BADAWI, *Aristū 'inda al-'Arab* cit., pp. 119-122. For a French translation, see S. PINES, *La "philosophie orientale" d'Avicenne*, «Archives d'Histoire doctrinale et littéraire du Moyen Âge», 19, 1952, pp. 5-37, pp. 6-9; for an English translation, see GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 60-64.

¹²³ This letter is included in the collection preserved in the Oxford MS, Bodleian Hunt. 534, at ff. 13v ult.-15v2. For an English translation, see GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 66-72. On this letter, see also PINES, *La "philosophie orientale" d'Avicenne* cit., pp. 35-37 and D. REISMAN, *The Making of the Avicennan Tradition: The Transmission, Contents, and Structures of Ibn Sīnā's al-Mubāḥaṭāt (The Discussions)*, Brill, Leiden 2002, pp. 195-203.

¹²⁴ Literally «of this man». Pines and Gutas suppose that Avicenna is alluding to the *Contra Aristotelem*. Avicenna's access to this work is also suggested by his correspondence with al-Bīrūnī (see *infra* n. 116).

apparently cogent, but states that facing the difficulties (*šukūk*) it tackles and solving them is a necessary step in science, which he achieved in an appropriate manner in his *Šifā'*. Referring again to the Christian philosophers of Bagdad, Avicenna claims that the above-mentioned « superficial scholars (*rasmīyyūn*) »¹²⁵ can neither understand such complex difficulties nor solve them, just as Philoponus himself was incapable of doing. He then adds that the only way to discard them, as he himself did, is to first consider the fundamental principles provided in the *Physics*, and then those provided in the *DC*¹²⁶. Avicenna ends the letter by recalling that he included an analysis of the Baghdadis' « weaknesses, deficiency and ignorance » in his treatise *The Fair Judgment* (*Kitāb al-Inṣāf*), lost during the sack of Isfahan.

The same hostility against the circle of Bagdad is attested in a letter, probably by Ibn Zayla¹²⁷, relating an episode of the last years of Avicenna's life. Pushed by his students to rewrite his lost treatise *The Fair Judgment*, Avicenna asked a friend to procure him the recent books of the two Baghdadi masters still alive, no doubt including Ibn al-Ṭayyib¹²⁸. The author relates that only the books by Ibn al-Ṭayyib could be located, among which was his commentary on the *DC*¹²⁹. He also reports that Avicenna's reaction, once he had examined them, was extremely severe. Avicenna despised Ibn al-Ṭayyib's commentaries, as he did those by Ibn al-Samḥ and Ibn al-Ḥammār, for the scantiness of their content as for the unsuitability of their method. Among all the invectives Avicenna heaps on Ibn al-Ṭayyib, the criticisms concerning his method are particularly interesting for us. Avicenna accuses him of adhering too closely to the transmission of certain books without analysing the details of the problems, as well as for dismissing logic completely. This drew Ibn al-Ṭayyib away from the right path. This is true, as Avicenna makes clear, not only of the books he recently came upon, but also of all those he previously examined. In all of them, Ibn al-Ṭayyib formulates dubious argumentation that fails to convince, produces inconsistent procedures, and uses rhetorical and sophistic methods in demonstrative sciences.

In both texts, then, Ibn al-Ṭayyib is criticized for dealing with Philoponus' difficulties without solving them, as well as for following a sophistic method in

¹²⁵ On the different meanings of this term, see PINES, *La "philosophie orientale" d'Avicenne* cit., p. 26, n. 3.

¹²⁶ This passage thus confirms, as we suggested in examining the first chapter of the *DCM*, that Avicenna establishes an essential link between the *Physics* and the *DCM* of the *Šifā'*.

¹²⁷ On this attribution, see REISMAN, *The Making of the Avicennan Tradition* cit., pp. 191-192.

¹²⁸ On the identification of the two masters, see GUTAS, *Avicenna and the Aristotelian Tradition* cit., p. 62 n. 9.

¹²⁹ This commentary could be identified with the one accompanying the Arabic translation attributed to him. See *infra* n. 8.

his commentary on the *DC*. These elements can buttress the hypothesis that he is to be identified with the anonymous opponent of the *DCM*. However, the later date of the events related in the letters makes it less plausible that Avicenna is alluding in the *DCM* to objections found in Ibn al-Ṭayyib's commentary on the *DC*.

The review of the previous sources does not exhaust the question concerning the *DCM*'s polemical background¹³⁰, but enough has been said to prove that Avicenna aims at refuting a Philoponian trend among his contemporaries. This is not to imply that Philoponus himself is not among Avicenna's targets, since the correspondence with al-Bīrūnī and the letter to Kiyā confirm that Avicenna was acquainted with at least the *Contra Aristotelem*. But it is indisputable that there is also another closer polemical setting against which Avicenna's *DCM* was constructed. It can be argued, in conclusion, that the entire study devoted to the inclinatory power, and Avicenna's effort to demonstrate its unitary nature, as well as its one-to-one correspondence with the simple body, must be understood in this Arabic polemical context. Aristotle's *DC* and the doctrine it conveys do not constitute a threshold that cannot be exceeded, but the theoretical background that is to be confirmed.

CONCLUSION

Despite the peculiar attention Avicenna's cosmology has received in more or less recent years, the *DCM* of the *Šifā'* is still a terra incognita in Avicennian studies. No modern translation of this treatise has ever been made, and the articles devoted to it can be counted on the fingers of one hand. Scholarship dealing with Avicenna's cosmological doctrines, notably his 'celestial psychology', focuses on other texts, inside and outside the *Šifā'*. Considering the very nature of the *DCM*, this state of affairs is not a mere coincidence. Any reader eager to find new insights on Avicenna's 'celestial noetics' would be disappointed, simply because such a study falls outside the *DCM*'s primary scope. By claiming this, I do not mean that the *DCM* does not concern essentially the heavens and the superlunary world, and that what Avicenna argues in it has no impact on his celestial physics and even his metaphysics. What I wish to argue is that Avicenna's project, in the *DCM*, is to study the superlunary world as a part of the whole world.

Accordingly, I have suggested that in order to understand the specific project of the *DCM*, one has to realize that Avicenna arranges it so as to solve the

¹³⁰ On the one hand, a detailed study of Ibn al-Ṭayyib's still unedited commentary on the *DC* is needed; on the other hand, other possibilities must be considered more carefully, notably the hypothesis that the correspondence between Ibn Zur'a and Yaḥyā ibn 'Adī, mentioned by Ibn al-Ṣalāḥ, might also have provided material for Avicenna's polemical background.

perplexities concerning the structure and the content of Aristotle's *DC*, raised by its Greek and Arabic readers. This is not to say that Avicenna did not have his own philosophical agenda, since he clearly wishes to inscribe this enquiry within the general project of his *Physics* of the *Šifā'*; but that he develops his doctrine, while remaining faithful to this twofold commitment.

Concerning the question of structure, I have suggested that the *DCM* avoids the reproach addressed to Aristotle's *DC* of lacking an inner unity, since it more clearly constitutes a unitary enquiry into the five simple bodies. This is revealed by the fact that Avicenna, unlike Aristotle, deals with sublunary simple bodies from the outset, and provides a study that is, as far as possible, common to them and to the celestial body. The unity of this common study relies on the way the simple bodies are considered, namely, with respect to their power. By following this approach, as I have also suggested, the *DCM* carries on the programme of the *Physics* of the *Šifā'* to study the body insofar as an internal power « which brings about motion and change » belongs to it. In this larger context, the specific aim of the *DCM* is to understand the ontological status of the powers of the simple bodies with respect to their motion and their form. For this reason, the *DCM* focuses primarily on what Avicenna calls the inclinatory power, which must be identified according to him with the lightness and heaviness of the simple bodies.

I wish to argue in conclusion that focusing on this notion, Avicenna also emphasizes the *DCM*'s specificity with respect to the *GC* and, henceforth, avoids the second difficulty raised against the Aristotelian treatise, namely, the supposed redundancy of *DC* III-IV and *GC* II. This is confirmed by the way Avicenna considers the body in the *GC* of the *Šifā'*, where he claims that the simple bodies can be understood in a threefold way: 1) as such; 2) as parts of the whole; 3) as elements of a composite body¹³¹. He explains that water, for example, understood as a part of the whole world, is characterized as heavy and moving downwards, while understood as an element it is characterized as possessing an active/passive power (that is, as cold and moist). He concludes that it is with respect to this power that the simple bodies are considered in the *GC*, because it is as such that they can interact with each other. This remark, therefore, confirms the suggested reading of the *DCM* and highlights its complementarity with the *GC*: the *DCM*, as an inquiry into the simple parts of the whole, considers simple bodies with respect to their inclinatory power, while the *GC*, being an enquiry of the mutual interaction of the simple bodies, considers them with respect to their active/passive power.

The doctrine of the inclinatory power is thus at the very core of Avicenna's solution of the structural difficulties addressed to Aristotle's *DC*. The present

¹³¹ Chap. 9.

contribution shows that this notion also constitutes the key to the DCM's most original contribution and that, in this case too, the criticisms addressed to Aristotle's text provide the framework within which Avicenna constructs his own doctrine. Three main theses show that Avicenna aims at the same time at innovating, while defending Aristotle's doctrine against his Greek and Arabic critics. As a final conclusion, I would like to pinpoint some of the new insights these three theses provide for the understanding both of Avicenna's own doctrine and of his preceding and subsequent tradition.

First, by claiming that the inclinatory power is not a direct consequence of the form of the simple bodies — since it stems from it *and* from an accident —, Avicenna deliberately withdraws the capacity to move from the simple bodies' ontological core. This doctrine can be traced back ultimately to Alexander of Aphrodisias' exegetical strategy, but operates in Avicenna as an ontological tool to highlight the separate nature of the substantial form. The metaphysical implications of this doctrine are crucial for both Avicenna's ousiology and his theory of emanation.

Second, by extending al-Fārābī's genus/species distinction to the celestial movements, Avicenna sets up the ontological framework that enables him to conclude that each celestial body has its own species. Strangely enough, scholarship has overlooked the relevance of this strategy with regard to both Avicenna's doctrine and the subsequent tradition. The DCM shows that the doctrine that heavenly bodies have one genus and several species, so harshly criticized by Averroes for its supposed metaphysical consequences¹³², is strongly rooted in Avicenna's physics and, hence, in the Farabian heritage. This consideration contributes new insights for the appraisal of both Avicenna's interpretation of the boundaries between physics and metaphysics, and of Averroes' criticism.

Third, by applying the distinction between primary and secondary intention to celestial movements, Avicenna manages to reconcile Ptolemy's new cosmological theories with the Aristotelian homocentric system. It is not farfetched to conclude that this strategy is a perfect exemplification of Avicenna's stance in the DCM: always with and beyond Aristotle.

The present contribution shows that, in all these cases, Avicenna elaborates his doctrine while responding to the difficulties raised by some near opponents. Although Philoponus's criticism provides the DCM's larger polemical background, the thorough analysis of these criticisms suggests that Avicenna's direct target is among his contemporaries. For different reasons, al-Bīrūnī and Ibn al-Ṭayyib and his circle are plausible candidates. Sticking to their doctrinal and philosophical stance,

¹³² On Averroes' criticism against Avicenna's doctrine, see C. CERAMI, *A Map of Averroes' Criticism against Avicenna: Aristotle's Natural Philosophy I*, in A. BERTOLACCI, D. N. HASSE eds., *The Arabic, Hebrew and Latin Reception of Avicenna's Natural Philosophy*, W. de Gruyter, forthcoming.

they raise doubts against the fundamental assumption of Aristotle's cosmology: the one-to-one correspondence between simple bodies and natural movements. The precise identification of Avicenna's sources requires further research; still, it is undeniable that it is to secure this doctrine and, hence, the existence of a special fifth nature, that Avicenna strives to ascertain the unitary nature of the inclinatory power and its exclusive connection with the body it belongs to.

APPENDIX I: PSEUDO-AVICENNA'S *DE CAELO ET MUNDO*

By writing the *DCM*, Avicenna thus intends to provide a treatise on the entire world and on its parts. This intention explains the arrangement as well as the scope of this part of the *Kitāb al-Šifā'*, which is not strictly speaking a treatise on cosmology. A general comparison with the homonymous treatise in sixteen questions wrongly transmitted as part of the earliest Latin translation as Avicenna's own *DCM* shows the originality of Avicenna's project and sheds some light on the Latin heritage of his treatise.

As I have previously recalled, Alonso suggested that this treatise is to be identified with the work by Ḥunayn ibn Ishāq mentioned in the *Kitāb al-Fihrist* after Themistius' paraphrase. Alonso examined all the parallel passages between pseudo-Avicenna's *DCM* and Themistius' paraphrase and concluded that the Arabo-Latin treatise is nothing but a compilation of parts of Themistius' work by Ḥunayn ibn Ishāq. Alonso's conclusion has been challenged more recently by R. Glasner¹³³ and O. Gutman¹³⁴. By emphasizing that a great deal material of the treatise does not derived from Themistius, Glasner concludes that the treatise as a whole cannot be considered a mere reformulation of Themistius' paraphrase¹³⁵. She also produces convincing arguments against the attribution to Ḥunayn ibn Ishāq. In particular, she points out that the theory of light attested in pseudo-Avicenna's *DCM* is not coherent with what we have by Ḥunayn ibn Ishāq on this issue¹³⁶. In a preliminary study and in the preface to the critical edition of the treatise, O. Gutman confirms Glasner's conclusions and claims that the treatise is much more than a mere collation of extracts of Themistius' paraphrase. He is more cautious, however,

¹³³ R. GLASNER, *The Hebrew Version of De Celo et Mundo Attributed to Ibn Sīnā*, « Arabic Sciences and Philosophy », 6, 1996, pp. 89-112; cf. H. KAHANA-SMILANSKY, *Solomon Ben Moses Melguiri and the Transmission of Knowledge from Latin into Hebrew*, in R. FONTAINE, R. GLASNER, R. LEICHT, G. VELTRI eds., *Studies in the History of Culture and Science. A tribute to Gad Freudenthal*, Brill, Leiden 2011, pp. 283-302: p. 293.

¹³⁴ O. GUTMAN, *On the Fringes of the Corpus Aristotelicum: the Pseudo-Avicenna Liber Celi et Mundi*, « Early Science and Medicine », 2/2, 1997, pp. 109-128; ID., *Pseudo-Avicenna. Liber Celi et Mundi*, A Critical Edition with Introduction, Brill, Leiden - Boston 2003 (hereafter PSEUDO-AVICENNA, *DCM*).

¹³⁵ On the Latin-Hebrew version, which is more of a paraphrase of the Latin text than a mere translation, see GLASNER, *The Hebrew Version* cit., pp. 96-101.

¹³⁶ On the authenticity of Ḥunayn's *Fī anna l-ḍaw' laysa bi-ḡism*, see R. ARNZEN, *Aristoteles' De*

about disavowing Ḥunayn's paternity, and claims that it is plausible to think that Ḥunayn wrote a treatise on the *DC* in sixteen questions that became the basis of what is now pseudo-Avicenna's *DCM*¹³⁷, which in its actual form could have been written by another Arabic author.

In her article, Glasner also adds arguments against the attribution to Avicenna. She points out that pseudo-Avicenna's *DCM* diverges from Avicenna's views on at least two issues: 1) the idea that the four elementary qualities are produced as a function of the distance from the celestial bodies; 2) on the nature of the heat proceeding from the heavens and the corpuscular nature of light¹³⁸. Concerning the first issue, she claims that Avicenna has a less 'derivative' theory of the four primary qualities. As for the second point, she emphasizes that Avicenna explicitly criticizes any theory that the sun's rays have a material nature.

The authorship of pseudo-Avicenna's *DCM*, thus, remains to be ascertained and an in-depth study of the content of the treatise is still a desideratum. Such an investigation goes beyond the purpose of the present article. I will limit myself to providing an overview of the structure of the treatise, with the aim of highlighting the differences between it and Avicenna's *DCM*. This approach will emphasize the originality of the plan of Avicenna's *DCM* and provide some hints toward explaining the reasons of the fortune of pseudo-Avicenna's *DCM* in the Latin world¹³⁹.

Anima. Eine verlorene spätantike Paraphrase in arabischer und persischer Überlieferung. Arabischer Text nebst Kommentar, quellengeschichtlichen Studien und Glossaren, Brill, Leiden - Boston 1998, pp. 708-717.

¹³⁷ An epitome of the *DC* by Ḥunayn ibn Ishāq is also mentioned by Ibn abī Uṣaybi'a under the title *Ḥawāmi' kitāb al-Samā' wa-l- 'ālam* (see IBN ABĪ UṢAYBI' A, 'Uyūn al-anbā', p. 200).

¹³⁸ GLASNER, *The Hebrew Version* cit., pp. 101-104.

¹³⁹ The text was translated from Arabic into Latin in the mid-12th century. It was already quoted in the last quarter of that century. We find a quotation of this treatise in Daniel of Morley, who considers it to be by Aristotle. The first attributions to Avicenna date back to 1230. Among the first writers to attribute it to Avicenna were Vincent of Beauvais and Albertus Magnus. Although Avicenna's paternity was questioned as early as 1266 by Roger Bacon, the treatise had a great fortune in the Latin world, to the point that it still featured in Bonetus Locatellus' Venetian edition of Avicenna's *Opera Omnia* (1508). On the Latin reception of the pseudo-Avicenna's *DCM*, see GUTMAN, *Pseudo-Avicenna. Liber Celi et Mundi* cit., pp. xvii-xxi.

Table 2: Outline of Pseudo-Avicenna's *De Caelo et Mundo* compared to Aristotle's *De Caelo*

PSEUDO-AVICENNA'S <i>DCM</i>	ARISTOTLE'S <i>DC</i>
Chapter 1: On the fact that the body is more perfect than every other quantity, and that the world is more perfect than every other body.	I, 1
Chapter 2: On the fact that nature of the heaven is outside the four natures, and that it is a simple body.	I, 2
Chapter 3: On the fact that the body of the heaven does not increase.	I, 3
Chapter 4: On the fact that the heaven is not susceptible to generation or destruction in its nature.	I, 3-4
Chapter 5: On the fact that the heaven is finite.	I, 5-7
Chapter 6: On the fact that there is only one world.	I, 8-9
Chapter 7: On the fact that the motion of the circle of the fixed stars from east to west cannot be a body.	II, 3
Chapter 8: On the fact that the heaven is spherical in shape.	II, 4
Chapter 9: On the fact that the whole universe is spherical in shape.	II, 4
Chapter 10: On the fact that the shape of the earth is spherical.	II, 4*
Chapter 11: On the fact that the motion of the heaven is constant.	II, 6
Chapter 12: On the action of the diversity and multitude of the motions of the heaven.	II, 7*
Chapter 13: On the nature of the planets.	II, 7-8
Chapter 14: On the reason why the heaven does not warm us and the sun and the other warming planets do.	II, 7*
Chapter 15: On the fact that the heaven moves with a motion which is visible to us, but the stars do not.	II, 11
Chapter 16: On the generation of the elements and their action.	III

A preliminary caveat is in order to appreciate the significance of this comparative table. As we have already emphasized, pseudo-Avicenna's *DCM*

is not, strictly speaking, a paraphrase of the *DC*, although it has its point of departure in Aristotle's text and appeals to Themistius' paraphrase in its developments. A comparison with the parallel passages in the *DC*, however, reveals some essential features of the treatise. A quick look at its table of contents shows that the author closely follows the structure of Aristotle's *DC*. First of all, we can remark that the structure of book I is preserved not only with regard to the presence of a preliminary chapter on the perfection of the body and three chapters on the special nature of the celestial body, but also with respect to the demonstration of the finite nature of the heavens and the uniqueness of the whole world, which follow, as in Aristotle's *DC*, the study of the fifth element. Although more emphasis is put on some issues only tangentially referred to in Aristotle's text, the structure of book II is *grosso modo* preserved as well¹⁴⁰. Last but not least, as in Aristotle's *DC*, the study of the four sublunary bodies and their mutual generation is provided after the enquiry into the celestial world.

However, the comparative table also points out a number of discrepancies that distinguish pseudo-Avicenna's *DCM* from the Aristotelian *DC*. In this case too, as I wish to suggest, the peculiarities of pseudo-Avicenna's *DCM* reflect the nature of the entire treatise. To begin with, we can note the absence of the discussion on the incorruptible character of the universe as a whole that Aristotle undertakes in I, 10-12. Unlike the actual *DC*, which devotes two chapters (II, 13-14) to the study of the Earth, the Arabic treatise does not contain any specific study of it, except for the chapter devoted to its shape. Above all, the very limited space accorded to the study of the sublunary elements must be emphasized. Not only there is merely one question devoted to the contents of the entire book III, but, more importantly, there is no parallel chapter devoted to the light and the heavy, which Aristotle studies in *DC* IV.

Some tentative conclusions can be drawn from this brief overview. First of all, the greater emphasis placed on the cosmological issues to the detriment of the study of the four sublunary elements shows by itself the epistemological nature of pseudo-Avicenna's *DCM*, which is conceived as a cosmological treatise. Moreover, in the last chapter, the author acknowledges that he is dealing with the generation of the four elements only insofar as it is the result of the movements of the celestial spheres. As a matter of fact, the whole chapter is far

¹⁴⁰ This is the case for chapter 14, which discusses the question why the heavens do not warm us, while the sun and the other warming planets do. Aristotle does not address the question in these terms, but he points out at the end of II, 7 (289a31-32) that the air beneath the sphere of the revolving body is necessarily heated by its motion, and particularly in that part where the sun is attached to it. The presence of a chapter on this issue is nevertheless unsurprising, since it was a matter of debate since at least the time of Alexander of Aphrodisias (on this topic see CERAMI, *Génération et Substance* cit., pp. 470-473 with bibliography).

from being a paraphrase of the *DC*. It aims at showing that the heavens affect the positions of the elements, which are ordered according to the more or less direct impact of the celestial movement: fire — which is the more affected — is at the top, air and water in between, and earth — which is the least affected — is at the centre.

The treatise ends with an explanation of the necessity of this arrangement, which reveals a 'providentialist' approach. The author claims that the generation of the four elements is the result of an *intentio*: primary in the case of the earth, and secondary in the case of the other three elements. For the existence of an intermediate layer of bodies between the heavens and the earth is necessary in order for the latter to be preserved. The preservation of the earth's stability is thus the result of a primary *intentio*, and the reason for the existence of the other simple bodies¹⁴¹.

In order to measure the originality of Avicenna's text as compared to pseudo-Avicenna's *DCM*, a final remark on the peculiar character of this latter is in order. In (the short) chapter 4 on the incorruptibility of the fifth body, the author seems to share Aristotle's 'eternalist' position and states that the heaven is everlasting (*sempiternum*). However, in chapter 5, in contrast with this assumption, he admits the created nature of the world¹⁴². In fact, in the demonstration of the finite nature of the heavens, he claims first that finite space is a consequence of finite motion, which is in turn a consequence of finite time, and concludes that the heavens, or more precisely the 'quantity of heavens', both in time and in its essence, is finite and has a beginning¹⁴³. It is plausible to suppose that the absence of a question parallel to *DC* I, 10-12, on the incorruptible character of the universe as a whole, is the result of the same two-sided attitude¹⁴⁴.

We can suggest, in conclusion, that both external and internal reasons account for the fortune of this treatise in the Latin Middle Ages and its attribution to Avicenna. The Latin translation of Avicenna's original *DCM*, as we shall see, was not carried out before 1274 at the earliest, while pseudo-Avicenna's *DCM* was part of the first wave of translations of Avicenna's work

¹⁴¹ PSEUDO-AVICENNA, *DCM*, p. 274, 3-5: « Ut autem hoc non contingeret, posita fuerunt cetera elementa media inter terram et celum, idcirco ut terra remaneret quiescens et perhennis in quiete ut non moveatur ».

¹⁴² ALONSO ALONSO, *Hunayn traducido cit.*, pp. 38-39; cf. GUTMAN, *Pseudo-Avicenna. Liber Celi et Mundi cit.*, p. 49, p. 77 n. 3.

¹⁴³ PSEUDO-AVICENNA, *DCM*, pp. 75, 18 - 76, 2: « Amplius autem postquam manifestum est quod non est possibile quantitatem infinitam habere esse vel fuisse vel futuram fore, tunc iam manifestum est quod quantitas celi in suo tempore et sua essentia finita est et initium habet ».

¹⁴⁴ Insofar as these two theoretical features display a certain theological awareness, they offer a new path for research on the authorship of the treatise. But, as I said, this research will be the object of a future study.

that took place in Toledo between 1150 and 1175¹⁴⁵. As one of the manuscripts attests (MS Vat. Lat. 2186), the treatise was translated into Latin by 'Gundisalvo', to be identified with Gundissalinus, and 'Johanne Hispalensi', who has been tentatively identified with the famous Jewish scholar Avendauth¹⁴⁶. The text was attributed to Avicenna since at least the mid-13th century, when Vincent of Beauvais mentions it as Avicenna's DCM in his *Speculum naturale* (1244-1246). In almost the same years, Albertus Magnus quotes it *verbatim* in his commentary on Aristotle's DC (ca. 1248-1251) and refers to it as Avicenna's *Sufficientia de libro Caeli et Mundi*¹⁴⁷. It is indisputable that the reputation of its translators, who rendered most of the original Avicennian treatises from Arabic into Latin, as well as the early date of its translation (ca. 1150-1175), played an essential role in the circulation of pseudo-Avicenna's DCM. However, we can also suggest that the purely cosmological nature of the treatise, as well as its more 'theological' stance, contributed to the transmission of the treatise among a public eager to fill a gap in the reception of Avicenna's philosophical *corpus*.

APPENDIX II: THE LATIN TRANSLATION OF AVICENNA'S DCM

As far as the Latin heritage of the original DCM of the *Šifā'* is concerned, we have already recalled that Avicenna's DCM was not among the sections translated in Toledo during the second half of the 12th century, but it was translated along with the third, fourth and fifth sections of the *Šifā'* in the last quarter of the 13th century. Unlike pseudo-Avicenna's DCM, the Latin translation of the original treatise by Avicenna had almost no circulation in the Latin Middle-Age. A single manuscript of the Vatican Library, the Latin Urbinat 186, transmits it along with the translation of the other three sections.

¹⁴⁵ The bibliography on this impressive cultural phenomenon is vast. On this topic, see notably M.-T. d'Alverny's ground-breaking studies, republished in EAD., *Avicenne en Occident*, Vrin, Paris 1993; see also the many fundamental studies of C. Burnett (notably C. BURNETT, *The Coherence of the Arabic-Latin Translation Program in Toledo in the Twelfth Century*, « Science in Context », 14, 2001, pp. 249-288 (repr. in Id., *Arabic into Latin in the Middle Ages. The Translators and their Intellectual and Social Context*, Routledge, Ashgate 2009, Article VII); Id., *Translating from Arabic into Latin in the Middle Ages: Theory, Practice, and Criticism*, in S. G. LOFTS, P.W. ROSEMAN eds., *Éditer, traduire, interpréter: Essais de méthodologie philosophique*, Peeters, Louvain 1997, pp. 55-78); and most recently A. BERTOLACCI, *A Community of Translators: The Latin Medieval Versions of Avicenna's Book of the Cure*, in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning. Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*, Brepols, Turnhout 2011, pp. 37-54.

¹⁴⁶ See GUTMAN, *Pseudo-Avicenna. Liber Celi et Mundi* cit., pp. x-xiii.

¹⁴⁷ For the exact references, see GUTMAN, *Pseudo-Avicenna. Liber Celi et Mundi* cit., p. xvii.

This manuscript was first described at the beginning of the 20th century, by Cosimo Stornajolo¹⁴⁸ and a second time in 1963, by Marie-Thérèse d'Alverny¹⁴⁹. It is a parchment manuscript copied in the 15th century. The beautiful handwriting and the ornaments that decorate it suggest that it was copied for someone of high rank. We know that it belonged to the Count, then Duke of Urbino, Frederic of Montefeltro¹⁵⁰. It contains only the natural philosophy of the *Šifā'* and, more precisely, the part that was not translated during the first wave of translations. The DCM is contained at the folios 83r-102v¹⁵¹. As a witness to Avicenna's text, as we will see, this manuscript contains a considerable number of mistakes, either made by its copyist, or already present in its model.

The manuscript provides crucial information about the authors of the translation, as well as on the identity of the recipient. The *explicit* of the first treatise informs us that the translation was carried out at the request of Gonzalo García Gudiel, described as bishop of Burgos. Gonzalo García Gudiel was a quite well-known figure of 13th century Spain. He was a member of an eminent family of Mozarabic origin, close to the kings of Castile. He was bishop of Cuenca between 1273 and 1275, then of Burgos between 1275 and 1280, when he was promoted to the archiepiscopal seat of Toledo¹⁵². The *explicit* thus allows the date of composition of the translation to be established with some precision. This information is confirmed by the two inventories Gonzalo García Gudiel had made of his books, first before his settlement in Cuenca and a second time before his assignment in Toledo.

The *explicit* also informs us that the translation of the four treatises had been carried out by Juan Gonzalo, referred to as appointed master (magister) in the same city of Burgos, and by a certain Salomon:

«Explicit Liber sufficientie phisicorum Avicenne. Translatus a magistro Iohanne Gunsalvi de Burgis et Salomone de Arabico in latinum. Ad preceptum Reverendissimi Patri ac Domni Domni Gunsalvi episcopi Burgensis, que est civitas in Hispania»¹⁵³.

¹⁴⁸ C. STORNAJOLO, *Codices Urbinales Latini*, T. I, Codices 1-500, Rome 1902, pp. 186-187.

¹⁴⁹ M.-T. D'ALVERNY, *Avicenna Latinus III*, «Archives d'histoire doctrinale et littéraire du Moyen Âge», 30, 1963, pp. 253-255.

¹⁵⁰ Cf. STORNAJOLO, *Codices Urbinales Latini* cit., p. 187. On Frederic of Montefeltro's library, see G. B. PICOTTI, *Frederigo da Montefeltro, duca di Urbino*, in *Enciclopedia Italiana*, vol. XIV, Roma 1949, pp. 958-959.

¹⁵¹ A transcription of this part of the manuscript is edited in M. RENAUD, *Le "De celo et mundo" d'Avicenne*, «Bulletin de Philosophie Médiévale», 15, 1973, pp. 92-130. The author, however, does not indicate the numerous textual problems the manuscript contains.

¹⁵² J. F. RIVERA RECIO, (Gonzalo) García Gudiel, in R. AUBERT ed., *Dictionnaire d'Histoire et de Géographie Ecclésiastiques*, T. 19, Letouzey et Ané, Paris 1981, n. 42, pp. 1191-1192; P. LINEHAN, *The Spanish Church and the Papacy in the Thirteenth Century*, Cambridge University Press, Cambridge 1971, p. 132 ff.

¹⁵³ Ms. Vat. Urb. lat. 186, f. 83r.

This information seems to attest that Juan Gonzales and Salomon worked together on the translation of the five treatises. We do not have much information on these two translators who are only known as authors of this translation¹⁵⁴.

The information provided by the *explicit* is partially confirmed by the *incipit* of the translation of the DCM, which no longer mentions Salomon:

«sequitur ac incipit eiusdem Avicenne liber de celo et mundo. Ab eodem magistro Iohanne Günsalvi De brugis [sic] translatus et dicitur secundus naturalium»¹⁵⁵.

One might be tempted to suggest that the translation of the part corresponding to the DCM was carried out by Juan Gonzalo without the collaboration of Salomon. Against this hypothesis, Alonso claims that the whole translation was carried out by the two authors 'in synergy'. The latter, probably of Jewish origin, translated from Arabic into a Castilian dialect, while the former translated from this dialect into Latin¹⁵⁶. The preliminary study I made of the translation of the DCM shows that this part shares the same specificities M. Alonso and S. Van Riet¹⁵⁷ have pointed out for the other ones.

In the following pages, I will analyse some case studies showing these common peculiar characteristics. Afterwards, I will show that the text transmitted by the Vatican manuscript is frequently marred by errors. Finally, I will draw some provisional conclusions on the place of the Latin translation with respect to the Arabic text, which will have to be confirmed by further study of the Arabic tradition.

In their respective studies, Alonso and Van Riet first of all stressed the literal character of the Latin version, attested according to them by the numerous word-for-word translations. Concerning the part corresponding to the GC, Van Riet also suggests that it bears the signs of an oral simultaneous work, consisting in a 'progressive translation' implemented by the cooperation of the two authors. She also suggests that the translation reflects the desire of the two authors to clarify Avicenna's text. I am not sure that it is quite possible to prove

¹⁵⁴ For more information, I refer to M. ALONSO ALONSO, *Las traducciones de Juan Gonzáles de Burgos y Salomon*, «Al-Andalus», 14, 1949, pp. 291-319; M.-T. D'ALVERNY, *Les traductions d'Avicenne* (Moyen Age et Renaissance), in *Problemi attuali di Scienza e di Cultura*, Avicenna nella storia della cultura medioevale, Quad. 40, Accademia Nazionale dei Lincei, Roma 1957, pp. 73-87 (repr. in EAD., *Avicenne en Occident* cit.).

¹⁵⁵ Ms. Vat. Urb. lat. 186, f. 83r.

¹⁵⁶ The role of the intermediate language was brilliantly proved by Alonso, who highlighted the several Hispanisms attested in this translation (see ALONSO ALONSO, *Las traducciones de Juan Gonzáles* cit.).

¹⁵⁷ S. VAN RIET ed., *Avicenna Latinus, Liber Tertius Naturalium, De Generatione et Corruptione*, Édition critique e la traduction latine médiévale et lexiques, Peeters, Louvain-La-Neuve 1987, p. 65^{*}-84^{*}.

the simultaneous oral character of the translation, at least as far as the part corresponding to the DCM is concerned. On the other hand, it seems to me that several aspects of this latter part confirm the 'progressive' character of the translation and reveal the translators' effort to render Avicenna's text more explicit than it is.

A first case that seems to attest the authors' willingness to improve their translation is a passage from the translation of the beginning of chap. 2¹⁵⁸:

« Iterum Item et quod movetur circa centrum (*wasat*) non sequitur necessario ut centrum (*wasat*) sit eius centrum (*markazan lahū*). Nam quamvis non sit eius centrum (*markazan lahū*) dum tamen sit intra eum dicimus quod movetur supra medium (*wasat*) quia movetur circa eum aliquo modo. Unum enim signatum est intra omnia mota quod movetur recte super centrum (*wasat*) et est quod terminat universum. Et debet esse centrum illius (*markazan lahū*). Et aliud ab isto uno bene poterit esse rotundum vel sphericum (*al-mustadīra*) quod movetur circa centrum (*wasat*) sicut non sit eius centrum (*markazahu*) medium (*wasat*) motus qui movetur versus centrum (*wasat*) et a centro (*wasat*). Istud igitur non erit illud in cuius comparatione medium (*wasat*) terminatur quod assignat partes naturales motibus rectis¹⁵⁹ ».

In the part of the present contribution devoted to Avicenna's doctrine, I have provided the context of this passage and made clear that in these lines, in order to reconcile Aristotle's cosmology with Ptolemy's theory of epicycles, Avicenna distinguishes the more properly geometric notion of 'centre', designated by the term *markaz*, from the physical notion of centre of the universe, namely, the 'middle', designated by the term *wasat*.

The Latin translators seem not to immediately grasp the need to differentiate between the two terms, *markaz* and *wasat*, which ordinarily can be used as synonymous. Accordingly, they translate the two terms by the Latin word *centrum*. Afterwards, although the term *centrum* remains their preferred choice to translate indifferently *markaz* and *wasat*, they try to discriminate *wasat* from *markaz* by translating the first one by *medium* and the second one by *centrum*.

Another feature of the Latin translation of the DCM is the translators' desire to clarify Avicenna's text and make it more easily accessible. Quite often, in fact, the translators spell out the reference of a pronoun and add words that, though not really necessary, facilitate the understanding of Avicenna's text. A case in point is a passage from chap. 1, where Avicenna aims at ascertaining how the powers of a simple body can account for its ontological constitution. As we have seen,

¹⁵⁸ The passage corresponds to AVICENNA, DCM, ch. 2, pp. 6, 13 - 7, 1, cf. *infra*, pp. 303-306.

¹⁵⁹ Ms. Vat. Urb. lat. 186, f. 83r26-34.

Avicenna affirms that we can envisage three solutions either that c, i) each one of the two powers is capable of making matter a subsisting substance in act (*malī'an bi-iqāmati māddatihi bi-l-fi 'li ġawharan qā'iman*); c, ii) only one of the two powers is capable of doing this; c, iii) only the combination of the two powers can do it. The expression *malī'an bi-iqāmati māddatihi bi-l-fi 'li ġawharan qā'iman* is translated by the rather unintelligible periphrasis *sufficiens ad dirigendam materiam ut sit actu substantiam per se stans*. Immediately afterwards, in the negation of this branch of the alternative, the expression *malī'an bi-iqāmati l-mādda* is again translated by *sufficit ad dirigendam materiam*, but the translators add *in actu* in order to clarify the expression and normalize the two occurrences. *In actu* is also added in the same line to translate the verb *yakūnu al-māddatu taqawwamat*:

«Nam ista tertia pars similis est ultimo de intellectu: quia vel quelibet erit sufficiens ad dirigendam materiam ut sit actu substantia per se stans, vel una earum erit huiusmodi, vel non erunt huiusmodi nisi ambe simul. Si igitur quelibet earum sufficit ad dirigendam materiam in actu, si separetur per se quelibet, sequeretur ex hoc quod dirigeretur materia in actu cum quacumque earum velles, et alia esset res ab extra ad dirigendam materiam que esset accidens et quelibet earum esset forma et accidens et istud est mendacium»¹⁶⁰.

Immediately afterwards, when Avicenna excludes the second branch of the three-fold division, the translators render *al-muqawwimu* in the same way, but they spell it out by adding *materiam*:

«Et si fuerit dirigens materiam una earum erit solummodo accidentalis, reducetur negotium secundum divisionem unam ex primis duabus»¹⁶¹.

This effort of clarification undoubtedly reveals the translators' insight. Other features of their translation, however, seem to be evidence of a certain lack of experience. Although the translators make use of a standardized vocabulary, their choices are not always consistent. In many cases, they do not decide between two translations and use several expressions more or less synonymously to translate one single Arabic word. Sometimes the two Latin translations are given together in the text.

The presence of double translations, one might object, is not necessarily the sign of inexperience, but of the translator's effort to clarify his text. However, the words our translators hesitate over are mostly technical terms of Avicenna's philosophical lexicon that should not trouble an experienced reader of the Avicennian corpus.

¹⁶⁰ Ms. Vat. Urb. lat. 186, f. 83r29-36.

¹⁶¹ Ms. Vat. Urb. lat. 186, f. 83r36-37.

Most hesitations concern basic notions of the Avicennian sub- and supra-lunary cosmology. The translators almost systematically translate *al-mustadīra* by the hendiadys *rotundum vel sphericum*; *kuriyyun* by *sphericum seu rotundum*; *muḥīt* by *circulus vel circonferentia*. *Madār* is translated sometimes by *axes*, sometimes by *circulos et revolutiones*. Another case in point is the translation of the expression *bi-l-qaṣd al-awwal*, which is translated sometimes by *essentialis*, sometimes by *de prima intentione vel essentie*, sometimes by *per appetitum essentialiter*.

I would now like to consider the reliability of the Urbinate 186. Van Riet has already pointed out that this manuscript contains several errors, either due to its copyist or inherited from its model. As in the case of the translations of other treatises, the part of the Vatican manuscript transmitting the DCM is quite complete, but contains several mistakes. Most errors are due to simple misreading of the model's abbreviations. But I have also noted a more significant problem. The whole section corresponding to lines 9, 7 - 22, 7 of the Arabic edition, which correspond to the folio 85r3-87v26, follows the wrong order.

The entire passage of the Vatican manuscript attests the following order: after the translation of line 9, 7 *wa-l-tānī an yakūna dālīka* (85r3 *secundum est quod*), we find the translation of lines 12, 10 *ba' duḥā*-15, 13 *qūwwa wāḥida* (85r3 *aliqua eorum*-85v43 *una potentia que*); then, that of lines 9, 7 *dālīka*-12, 9 *aw sakana* (85v43 *illud corpus*-86r35 *vel quiescunt*); afterwards, that of lines 19, 5 *fa-yakūnu*-22, 7 *qismayni* (86r35 *Erit ergo*-87v26 *duas partes*); finally that of lines 15, 13 *hiyā*-19, 5 *allatī aḥadtahā* (87v26 *Ipsamet*-88r20 *quas assumpsisti*). After a half-blank page, the translation resumes at folio 89v1 *aliud est*, corresponding to line 22, 9 *minhu* onward.

The misplacement is clearly due to a mechanical error. If one counts the lines of each misplaced section, one realizes that the two inner bifolios of a quire have been switched, the first one containing the translation of lines 9, 7 - 12, 9 and 19, 5 - 22, 7, the second one containing the translation of lines 12, 10 - 15, 13 and 15, 14 - 19, 5. This error enables us to calculate quite precisely the size of one folio of the Vatican manuscript's model, which consisted of approximately 43 lines of the Vatican manuscript. We can then deduce that the model of this latter manuscript was just two lines shorter than it is.

I will briefly conclude this overview by considering the place of the Latin translation with respect to the Arabic tradition. I note first of all that Alonso compared the Latin translation of the Vatican 186 to the Madrid manuscript Biblioteca Nacional 5008, which belonged to the Toledo Cathedral Library. A preliminary survey of the part transmitting the DCM¹⁶² points out that this

¹⁶² I wish to thank M. Aouad for providing me a pdf copy of the Madrid manuscript, made in the context of his European Research Council project *Philosophy in Context: Arabic and Syriac manuscripts transmission in the Mediterranean World*.

manuscript was not the model used by the translators. This is confirmed by the presence in the Madrid manuscript of several omissions, due to homeoteleuton, absent from the Latin translation¹⁶³.

As I said, no final conclusion can be drawn on the place of the Latin translation before carrying out a more in-depth study of the whole tradition. However, a comparison with the manuscripts used in the Cairo edition could support some tentative hypotheses. In most cases, the Latin translation is on the side of the manuscripts signified by *dal* and *sa* respectively. It shares some specific variants ('varianti separative') with the two manuscripts¹⁶⁴, others with *Dal* alone¹⁶⁵, and others with *Sa* alone¹⁶⁶. It can also be noted, however, that *Dal* has several omissions that do not appear in the Latin text¹⁶⁷. It could therefore be inferred that the Latin translation belongs to the same family as these manuscripts, but that its model comes from an earlier stage of the tradition. But this, I hasten to repeat, remains a hypothesis to be verified by a further study of the Arabic tradition.

¹⁶³ This does not exclude that the translators could also have had available other Arabic manuscripts used to rectify the lacunae.

¹⁶⁴ AVICENNA, *DCM*, p. 3, 1-3.

¹⁶⁵ *Ibid.*, pp. 3, 14 - 18; p. 3, 5-7.

¹⁶⁶ *Ibid.*, p. 17, 7-8.

¹⁶⁷ See again *ibid.*, p. 3, 14-18.

ABSTRACT

The De Caelo et Mundo of Avicenna's Kitāb al-Šifā' : An Overview of its Structure, its Goal and its Polemical Background

The present paper is devoted to Ibn Sīnā's (Avicenna's) *De Caelo et Mundo* (*al-Samā' wa-l-ālam*), the second section of the physical books of the *Kitāb al-Šifā'*. It aims at providing a study of its structure and goals and its place within the framework of Avicenna's natural philosophy. This inquiry shows that, without being a standard treatise of cosmology, Avicenna's treatise must be seen as a study of the five simple bodies that constitute the universe as a whole. Against this background, Avicenna establishes the unitary nature of the active and passive powers of the simple bodies, as well as the relation between inclination, natural motion and form. By framing the text within a broader philosophical and historical context, this paper also suggests that Avicenna's investigation aims ultimately at rebuking a neo-Philoponian trend among his Arabic contemporaries. Two appendixes are devoted to the Latin heritage of Avicenna's text. The first one provides a general overview of the treatise wrongly transmitted as Avicenna's own *DCM* as part of the earliest Latin translation of his *Kitāb al-Šifā'*. The second one takes into account the Latin translation of the authentic *DCM* and highlights some of its peculiarities.

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SILVIA DI DONATO

Les trois traductions latines de la *Météorologie* d'Avicenne : notes pour l'histoire du texte*

Les trois branches de la tradition par laquelle la traduction de la *Météorologie* du *Šifā'* d'Avicenne¹ a été transmise au monde latin — c'est un fait acquis — sont indépendantes l'une de l'autre et se distinguent du point de vue de la chronologie, des traducteurs et des savants impliqués, du projet intellectuel donnant l'impulsion aux traductions et de leur fortune².

* Cette contribution contient le développement d'une communication que j'ai présentée au colloque *A Crossroad between East and West. The Latin Mediaeval Translations of the Kitāb al-Šifā' (Book of the Cure) of Ibn Sīnā (Avicenna)*, Pise 2015. Elle nait de la collaboration avec Jean-Marc Mandosio concernant l'étude et l'édition du texte de la *Météorologie* d'Avicenne, d'après la version latine conservée dans le manuscrit Urb. Lat. 186 (voir *infra*) et l'original arabe, en complément des séminaires tenus par ce dernier à l'École Pratiques des Hautes Études (Paris). Je tiens à remercier les éditeurs et les réviseurs de leur aide et de leurs suggestions, et Dr. Marie-Odile Volpoët d'avoir révisé le français de cet article.

¹ *Šifā'*, deuxième somme (consacrée à la Philosophie naturelle), cinquième partie en deux livres, *Sur les minéraux et les manifestations élevées* (ci-dessous, les références à l'ouvrage sont abrégées ainsi : 2, V, I/II, ch.). IBN SĪNĀ, *Al-Shifā'*, *al-Ṭabī'īyyāt, al-Ma'ādīn wa-l-Ātār al-'ulwiyya*, éd. A. MUNTASIR, S. ZĀYID, A. ISMĀ'ĪL, I. MADKŪR, Le Caire 1965.

² Les données saillantes à propos de la traduction de la *Météorologie* du *Šifā'* se trouvent éparpillées dans des publications diverses, de l'édition du *De congelatione et conglutinatione lapidum* par Holmyard et Mandeville (voir *infra*), à l'introduction à l'ensemble de la tradition qui précède le répertoire des manuscrits de l'*Avicenna latinus* par M. T. d'Alverny. Elles ont été récemment récapitulées et organisées par J.-M. MANDOSIO, C. DI MARTINO, *La "Météorologie" d'Avicenne (Kitāb al-Šifā' V) et sa diffusion dans le monde latin*, dans A. SPEER, L. WEGENER eds., *Wissen über Grenzen : arabisches Wissen und lateinisches Mittelalter*, De Gruyter, Berlin 2006, pp. 406-424 ; J.-M. MANDOSIO, *Follower or opponent of Aristotle ? The critical reception of Avicenna's Meteorology in the Latin world and the legacy of Alfred the Englishman* (à paraître), à propos notamment de la réception par Alfred de Sareshel (voir *infra* ; je remercie Jean-Marc Mandosio de m'avoir permis de lire sa contribution avant la publication). Voir également, A. BERTOLACCI, *A Community of Translators : The Latin Medieval Versions of Avicenna's Book of the Cure*, dans C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning : Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*, d. C. , Brepols, Turnhout 2011, pp. 37-54.

Le contenu de la *Météorologie* d'Avicenne ne rentre pas dans la perspective du présent article. Afin de fournir les repères essentiels, il convient juste de rappeler sommairement que l'auteur organise les deux livres de son traité en se basant sur la distinction, d'abord, entre les deux zones du monde sublunaire où les phénomènes ont lieu : la terre et ce qui est au-dessus de la terre. En analysant donc respectivement ce qui se passe à la surface de la terre, dans le premier livre, et puis, dans le deuxième livre, les phénomènes météorologiques qui se produisent au-dessus de la terre, le texte d'Avicenne procède de manière 'ascendante' selon l'ordre des quatre éléments, en allant de la terre au feu.

En prenant comme point de départ les études des spécialistes, le propos du présent article est de considérer les vicissitudes de la tradition de la *Météorologie* non pas dans l'optique de parcourir la réception latine de l'œuvre d'Avicenne et notamment des livres naturels du *Šifā'*, mais en tant qu'élément de la tradition pouvant en mettre en lumière des aspects saillants. Le caractère discontinu de la réception de la *Météorologie*, du point de vue chronologique et également sur le plan des intentions spécifiques et des circonstances qui ont constitué le terrain où chacune des diverses phases de réception s'est produite, est l'élément historiquement et philologiquement clé qui constitue le point d'appui de l'analyse.

L'étude vise donc en premier lieu à distinguer, analyser et contextualiser les circonstances spécifiques, les caractéristiques philologiques marquantes ainsi que les buts textuels et philosophiques qui ont motivé l'activité des protagonistes de chacune des phases de réception de la *Météorologie*. Ces données prennent une place importante dans la discussion détaillée visant à vérifier les différentes hypothèses d'attribution de la traduction anonyme du *De diluviis* (voir *infra*) et dans l'analyse de la troisième étape de réception, où une attention particulière est consacrée à la présentation du manuscrit qui la conserve et au rapport entre le texte latin et l'original arabe.

Le tableau qui se dégage de cette analyse met en lumière le caractère discontinu de la réception, de la *Météorologie* et du *Šifā'*; c'est un aspect significatif qui permet d'interpréter la tradition et, entre autre, de clarifier la situation de l'ouvrage d'Avicenne dans le cadre des traductions tolédanes du XII^e siècle. Il consent aussi de confirmer le rôle d'Avicenne et de son œuvre comme autorité de l'aristotélisme dont la lecture aide à la compréhension des sources anciennes, et enfin de saisir le reflet articulé d'un milieu intellectuel dynamique où les protagonistes — c'est-à-dire les traducteurs — partageaient l'accès aux mêmes lectures philosophiques tout en étant motivés par des intérêts et des intentions doctrinales différentes.

Les deux premières étapes de l'histoire du texte latin de la *Météorologie* sont chronologiquement et géographiquement concomitantes avec la traduction d'une importante partie du *Šifā'* faite à Tolède après les années 1160, essentiellement par Dominicus Gundissalinus (ca. 1110 - ca. 1190) et Abraham Ibn Dawud (ca.

Pour le détail du contenu je renvoie au schéma dans MANDOSIO, DI MARTINO, *La "Météorologie" d'Avicenne* cit., pp. 421-422. J.-M. Mandosio a consacré une analyse détaillée à l'organisation du matériau météorologique de la part d'Avicenne, entre la quatrième partie de la philosophie naturelle (*Sur les actions et les passions*) et les deux livres de la cinquième (*Sur les minéraux et les manifestations élevées*) dans sa communication au colloque *A Crossroad between East and West. The Latin Mediaeval Translations of the Kitāb al-Šifā' (Book of the Cure) of Ibn Sīnā (Avicenna)*, Pise 2015; une présentation approfondie se trouve dans l'article du même auteur *Follower or opponent* cit.

1110-1180; c'est à ce dernier que revient le rôle principal dans l'impulsion qui a donné lieu à la réception latine de l'œuvre d'Avicenne³). L'introduction, une partie de la Logique (*Isagoge* et une partie des *Secunds analytiques*), une partie de la *Physique*, le *De anima* et la *Métaphysique* furent traduites en latin. Néanmoins les deux versions partielles de la *Météorologie* sont indépendantes de cette entreprise, elles se démarquent notamment par le fait que l'œuvre d'Avicenne en tant que telle n'était pas le véritable objectif des traducteurs ni de leurs proches interlocuteurs. Dans les deux cas, il s'agissait de traductions fonctionnelles, qui rendaient de fait accessible un texte devant servir en première instance à la compréhension et à l'étude d'autres sources. Si la réception de l'ouvrage d'Avicenne peut être vue comme l'un des deux axes parallèles du mouvement de traduction ayant pris forme à cette époque, les premières versions de la *Météorologie* pourraient être qualifiées d'une sorte de tradition directe dont la réception a été indirecte, du point de vue de l'intention et des circonstances spécifiques dans lesquelles les traductions ont été produites.

1) L'histoire textuelle du *De mineralibus*, par Alfred de Sareshel, est désormais bien connue⁴. Accomplie vers la fin du XII^e siècle, cette traduction est l'aboutissement d'une opération éditoriale délibérée où des extraits du livre I de la *Météorologie* du *Šifā'* — le premier chapitre sur l'origine des pierres et des montagnes (*Šifā'* 2, V, I, ch. 1) et le cinquième chapitre sur les minéraux et les métaux (*Šifā'* 2, V, I, ch. 5) — venaient combler une lacune dans l'œuvre d'Aristote et par conséquent dans sa doctrine. La rédaction détaillée d'Avicenne restituait, dans l'interprétation et l'intention du traducteur-compileur, la théorie des minéraux, au sujet de leur nature et de leurs différentes espèces, que le Stagirite annonce à la fin du livre III des *Météorologiques* sans toutefois l'aborder. Le traducteur agit ici en philologue,

³ Voir en particulier S. VAN RIET, P. JODOGNE, *Avicenna Latinus. Codices. Codices descripsit M.-T. d'Alverny. Addenda collegerunt S. Van Riet et P. Jodogne*, Peeters Publishers, Leuven 1994, p. 4 ss., et les études récentes de A. FIDORA, *Ein philosophischer Dialog der Religionen im Toledo des 12. Jahrhunderts: Abraham Ibn Daud und Dominicus Gundissalinus*, dans Y. SCHWARTZ, V. KRECH éd., *Religious Apologetics – Philosophical Argumentation*, Mohr Siebeck, Tübingen 2004, pp. 251-266; C. BURNETT, *Arabic into Latin in the Middle Ages: The Translators and their Intellectual and Social Context*, Ashgate, Farnham-Burlington 2009; A. BERTOLACCI, *The reception of Avicenna in Latin medieval culture*, dans P. ADAMSON éd., *Interpreting Avicenna. Critical Essays*, Cambridge University Press, Cambridge 2013, pp. 242-269; G. FREUDENTHAL, *Abraham Ibn Daud, Avendauth, Dominicus Gundissalinus and Practical Mathematics in Mid-Twelfth Century Toledo*, « Aleph », 16/1, 2016, pp. 61-106.

⁴ En ce qui concerne cette étape de réception, l'analyse des modes, des aspects clé et de l'approche aux sources de la part de son protagoniste est menée dans le détail par MANDOSIO, *Follower or opponent* cit. Voir aussi MANDOSIO, DI MARTINO, *La "Météorologie" d'Avicenne* cit.; E. J. HOLMYARD, D. C. MANDEVILLE, *Avicennae de congelatione et conglutinatione lapidum being Sections of the Kitāb al-Šifā'*, Librairie orientale Paul Geuthner, Paris 1927; E. RUBINO, *Alfredo di Shareshill editore della meteorologia aristotelica*, « Giornale critico della filosofia italiana », 94, 2015, pp. 496-479.

extrapolant et adaptant le texte qu'il estimait être d'Aristote, et reconstituant ainsi son état 'originel' tel qu'il aurait été conservé chez Avicenne, reconnu comme maître de l'aristotélisme et interprète du Stagirite⁵.

L'activité de traducteur d'Alfred s'est concrétisée dans la traduction des parties de la philosophie naturelle portant sur les minéraux et les plantes. Elle se situe en continuité avec l'entreprise de traduction gravitant autour de Gérard de Crémone et suivant un programme cohérent qui, en ce qui concerne la philosophie, visait à l'acquisition des œuvres d'Aristote et de certains de ses commentateurs dont la lecture devait être utile à la compréhension des écrits du Stagirite. En outre, elle correspond au principal domaine d'intérêt et de connaissance d'Alfred, qui s'intéressait aux *libri naturales* et notamment à la science météorologique⁶. L'élément qu'il est intéressant de remarquer et de souligner est que la traduction du *De mineralibus* est le résultat et révèle la riche coprésence d'apports concourants autour du programme de traduction tolédan : si l'intention qui a motivé cette version n'a nullement été en relation directe avec celle de la réception d'Avicenne, l'œuvre de ce dernier avait pris sans doute une place de premier plan en tant que corollaire à la lecture d'Aristote et des anciens, parmi les sources qui constituaient les lectures philosophiques des savants juifs et arabes de l'époque, et qui étaient disponibles à Tolède, accessibles aux Latins connaissant l'arabe et en partie en train d'être traduites⁷.

⁵ Le même type d'opération concerne l'autre traduction d'Alfred, celle du *De plantis* pseudo-aristotélicien, faite à partir de la version arabe du *De vegetabilibus et plantis* de Nicolas de Damas, qui a été reçue comme étant l'ouvrage d'Aristote. La production d'Alfred comprend les deux traductions : *De mineralibus* et *De plantis*, œuvres desquelles il a composé des commentaires (il a peut-être existé un autre commentaire perdu sur le *De generatione et corruptione*, cf. *Nicolaus Damascenus de Plantis Five Translations*, éd. H. J. DROSSAART LULOFS, E. L. J. POORTMAN, North-Holland Publishing Company, Amsterdam - Oxford - New York 1989, p. 469) et l'écrit originel *De motu cordis*. C. BAEUMKER éd., *Des Alfred von Sareshel (Alfredus Anglicus) Schrift de Motu cordis*, Aschendorff, Münster 1923 ; R. J. LONG, *Alfred of Sareshel's Commentary on the Pseudo-Aristotelian De plantis: A Critical Edition*, « Mediaeval studies », 47, 1985, pp. 125-167 ; *Nicolaus Damascenus de Plantis* cit., p. 468 ss. ; RUBINO, *Alfredo di Sharesill editore della meteorologia aristotelica* cit. ; MANDOSIO, *Follower or opponent* cit. ; cf. l'article de Elisa Rubino dans le présent volume.

⁶ Cf. C. BURNETT, *The Coherence of the Arabic-Latin Translation Program in Toledo in the Twelfth Century*, « Science in Context », 14, 2001, pp. 249-288.

⁷ C. Burnett suggère que Alfred, de même que Michel Scot après lui, ait travaillé à partir du manuscrit du *Šifā'* d'Abraham ibn Dawud. Cf. BURNETT, *The Coherence of the Arabic-Latin Translation Program* cit., p. 264. En ce qui concerne la question de l'ampleur et des traces de la réception d'Avicenne chez les savants juifs médiévaux, plusieurs plans d'analyse en constituent la complexité : de la disponibilité des textes et des manuscrits à la question linguistique de l'accès aux sources par les savants juifs de différents milieux géographiques et de différentes époques, des auteurs montrant une dépendance doctrinale aux traces pouvant être qualifiées d'influence indirecte. Voir G. FREUDENTHAL, M. ZONTA, *The reception of Avicenna in Jewish cultures, East and West*, dans ADAMSON éd., *Interpreting Avicenna* cit., pp. 214-241 et notamment la récente étude (et les indications bibliographiques) par EID., *Avicenna among mediaeval Jews*, « Arabic Sciences and Philosophy », 22/2, 2012, pp. 217-287 ; une réponse critique apportant un complément d'analyse a été publiée par S. HARVEY, *Some notes on 'Avicenna among mediaeval Jews'*, « Arabic Sciences and Philosophy », 25, 2015, pp. 249-277.

Grâce aux liens et au contexte dans lequel il a opéré, Alfred a pu acquérir une connaissance approfondie du *Šifā*⁸ où puiser, comme source de la tradition aristotélicienne. Et c'est en raison de cette compétence, témoignée par son activité de rédaction et de traduction, et de l'utilisation qu'il a fait de cette source que certains spécialistes (notamment M. T. d'Alverny) ont suggérée de lui attribuer également l'autre traduction partielle de la *Météorologie* du *Šifā*⁹.

2) Le dernier chapitre du second livre de la *Météorologie* du *Šifā*, consacré aux « Évènements remarquables qui se vérifient dans le monde », a fait l'objet d'une traduction anonyme, transmise sous le titre de *De diluviis in Timaeum Platonis*¹⁰. Le renvoi au *Timée* est explicite dans l'ensemble des onze manuscrits conservés de la traduction¹¹ laquelle se présente donc comme une lecture de support, expressément exploitée pour élucider une source majeure : le dialogue de Platon dont la doctrine cosmologique était connue en latin depuis le IV^e-V^e siècle, grâce à la traduction partielle et au commentaire de Calcidius (17a-53c), et servait d'assise aux connaissances des auteurs du XII^e siècle¹².

Le chapitre du *Šifā* en question correspond au chapitre 14 du premier livre des *Météorologiques* d'Aristote, où est abordée la question des cycles d'intervention des terres et des mers, du devenir des terres et des populations, du changement naturel, de l'excès de pluies « à la manière du déluge »¹³, qui fait que ce ne

⁸ Cf. MANDOSIO, *Follower or opponent* cit.

⁹ D'ALVERNY, *Avicenna Latinus: codices*, p. 6. On reviendra plus loin sur la question de l'anonymat de cette traduction.

¹⁰ Le texte a été publié, d'après le manuscrit de bibliothèque Colbertina (voir ci-dessous) par M. ALONSO ALONSO, *Las traducciones de Juan Gonzalez de Burgos y Salomon*, « Alandalus », 14, 1949, pp. 291-319. Une édition critique est en cours de préparation par Dag N. Hasse.

¹¹ Naples, Biblioteca nazionale, ms. XI.AA.49 (2), Liber V Naturalium (XVI^e s.); Cité du Vatican, ms. Vat. Lat. 725, ff. 36v-37r (XIII^e-XIV^e s.); Cité du Vatican, ms. Vat. Lat. 4426, f. 1r-1v (XIV^e s.); Graz, Universitätsbibliothek, ms. 482, ff. 241v-242r (XIII^e s.); Erfurt, Stadtbibliothek, ms. Amplon. Q. 15, f. 49r-49v (XIV^e s.); Munich, Bayerische Staatsbibliothek, ms. CLM. 8001, f. 26r-26v (XIII^e s.); Nuremberg, Stadtbibliothek, ms. Cent. V. 21, f. 181v (XIV^e s.); Cordoue, Biblioteca Colombina, ms. 5.6.14, ff. 92v-93r (XIII^e s.); Cracovie, Jagiellonian Library, ms. 1718, ff. 225v-226r (XIII^e s.); Chicago, Newberry Library, ms. 23 (olim Melk, Klosterbibliothek, 529), ff. 181v-182r (XIV^e s.); Palerme, Biblioteca comunale, ms. Qq. G. 31, ff. 199v-201r (1454, paraphrase?).

¹² Le dialogue avait été partiellement traduit aussi par Cicéron (27d-47b). Cf. I. CAIAZZO, *The Four Elements in the Work of William of Conches*, dans B. OBRIST, I. CAIAZZO éd., *Guillaume de Conches: Philosophie et Science au XII^e siècle*, SISMEL-Edizioni del Galluzzo, Firenze 2011, pp. 3-66; Ead., *La materia nei commenti al Timeo del secolo XII*, « Quaestio », 7, 2007, pp. 245-264; T. LEINKAUF, C. STEEL éd., *Plato's Timaeus and the Foundations of Cosmology in Late Antiquity, the Middle Ages, and Renaissance*, Leuven University Press, Leuven 2005.

¹³ ARISTOTE, *Météorologiques*, I, 14, 351a20. ARISTOTE, *Météorologiques*, trad. J. GROISARD, Flammarion, Paris 2008.

sont « pas toujours les mêmes lieux de la terre qui sont secs ou humides »¹⁴. Le texte aristotélicien constitue le point de départ de l'argumentation d'Avicenne, laquelle n'en est pas pour autant une simple reprise ou un commentaire; elle est beaucoup plus ample et c'est dans le texte, les thèmes et la perspective cosmologique et métaphysique du *Timée* qu'elle trouve un écho: « Bien des fois et de bien des manières, le genre humain a été détruit, et il le sera encore. Les catastrophes les plus importantes sont dues au feu et à l'eau, mais des milliers d'autres causes provoquent des catastrophes moins importantes. [...] Les corps qui, dans le ciel, accomplissent une révolution autour de la terre sont soumis à une variation (*parallaxis*) qui se reproduit à de longs intervalles; ce qui se trouve à la surface de la terre est alors détruit par un excès de feu. À ces moments-là, tous les êtres humains qui sont établis sur des montagnes et en des lieux élevés ou secs périssent [...] Quand, en revanche, les dieux, pour purifier la terre, provoquent un déluge, ce sont les habitants des montagnes qui sont épargnés »¹⁵.

Après avoir décrit la nature d'un déluge, qui est précisément « la victoire d'un des quatre éléments sur le quart habitable de la terre » — malgré le fait que le plus connu soit le déluge d'eau et que par conséquent ce soit ce dernier que le terme désigne par simplification —, Avicenne décrit la manière dont un déluge se produit: par une conjoncture astrale particulière et des causes accidentelles, telles que des vents ruineux, pour les déluges d'air, ou l'ignition soudaine de vents forts, pour les déluges de feux. Or, ces phénomènes peuvent provoquer la disparition des terres habitables et l'extinction des êtres animaux et des plantes. L'affirmation de cette conséquence sert à l'auteur de transition pour aborder le thème qui occupe la suite du chapitre: la majeure partie de cette unité — presque deux tiers — est consacrée au discours sur la possibilité de génération spontanée des espèces animales, à la suite d'événement catastrophique tel qu'un déluge¹⁶.

¹⁴ ARISTOTE, *Météorologiques*, I, 14, 352a32.

¹⁵ PLATON, *Timée*, 22c-23b. PLATON, *Timée*, trad. L. BRISSON, Flammarion, Paris 2001⁵. *Parallaxis* désigne ici « un phénomène astronomique qui se produit à intervalles réguliers et qui se situe dans le cours normal des choses, même s'il provoque des catastrophes », cf. n. 59, p. 226. — Le thème des changements et des exterminations dues aux inondations et autres cataclysmes revient également dans les *Lois* (III, 677a-b), à propos de l'origine des constitutions politiques.

¹⁶ Cf. A. BERTOLACCI, *Averroes against Avicenna on Human Spontaneous Generation: The Starting-Point of a Lasting Debate*, dans A. AKASOY, G. GIGLIONI édés., *Renaissance Averroism and Its Aftermath: Arabic Philosophy in Early Modern Europe*, Springer, London 2013, pp. 37-54; D. N. HASSE, *Spontaneous generation and the ontology of forms in Greek, Arabic and medieval Latin sources*, dans P. ADAMSON éd., *Classical Arabic Philosophy: Sources and Reception*, The Warburg Institute - Nino Aragno, London - Torino 2007, pp. 150-175. — Le chapitre et l'argument d'Avicenne se concluent avec un parallèle illustratif portant sur la nature et la manifestation ou l'absence, durant de longs intervalles de temps, des qualités artistiques chez les hommes, pour montrer comment une caractéristique peut exister sans avoir toujours existé et alors qu'elle ne s'est pas manifestée pendant de longues générations (cf. IBN SĪNĀ, *Al-Šifā'*, 2, V, II, ch. 6, p. 79).

Avicenne admet la possibilité qu'en conséquence d'une rare configuration céleste et d'une disposition des éléments spécifiques, qui ne se produit que dans des laps de temps très longs, « il n'est pas contestable que les animaux et les plantes, ou certaines de leurs espèces, disparaissent et puis viennent à l'être [à nouveau] par génération [spontanée] sans reproduction. En effet, aucune démonstration n'empêche l'existence et l'innovation des choses après leur extinction, par génération [spontanée], sans reproduction. Plusieurs animaux adviennent par génération [spontanée] et reproduction, et également les plantes »¹⁷. En effet, c'est un mélange donné qui constitue le fondement des choses existantes, et en dernière instance ce sont les éléments, par leur composition, selon des conditions et des proportions particulières. Si ce mélange se produit, le rôle de protection de l'utérus est superflu (« il ne fait rien si ce n'est que retenir, combiner et accomplir »¹⁸); et dans ces circonstances extraordinaires, l'action formative peut venir de l'action directe du *Dator formarum*.

Comme dans le cas du *De mineralibus*, c'est le rapport avec une source ancienne, beaucoup plus que la paternité avicennienne, qui est le trait distinctif de ce texte et la motivation de sa traduction latine. En effet, le chapitre du *Šifā'* représente un approfondissement remarquable touchant à des questions physiques et cosmologiques que les lecteurs latins connaissaient à partir du *Timée*, la source primaire de la doctrine de l'origine du monde, des principes des êtres, de la structure de la réalité matérielle et de la nature humaine. Et c'est en remplissant cette fonction de corollaire et de développement que la traduction se trouve dans les manuscrits qui la conservent, sans qu'aucun rapport avec le reste de l'œuvre d'Avicenne en tant que telle ne vienne la caractériser d'une manière quelconque. L'attribution même à Avicenne, dans les manuscrits, est absente ou a été ajoutée postérieurement (c'est le cas dans trois manuscrits). La mention et les citations du *De diluviis* par Albert le Grand représentent le seul témoignage indirect connu de la traduction latine anonyme et de l'attribution explicite à Avicenne¹⁹. Cependant, contrairement au *De mineralibus* qui a été attribué à Aristote, cette circonstance n'a pas donné lieu à une distorsion ou une confusion dans l'histoire du texte du *De diluviis*. Le témoignage d'Albert

¹⁷ IBN SİNĀ, *Al-Šifā'*, 2, V, II, ch. 6, pp. 76-77.

¹⁸ IBN SİNĀ, *Al-Šifā'*, 2, V, II, ch. 6, p. 77.

¹⁹ Les références se trouvent dans I et II *De creaturis* (cf. ALONSO ALONSO, *Las traducciones cit.*, p. 305, note 1), et aussi dans le *De causis proprietatum elementorum* I, tract. 2, cap. 13. Le *De diluviis* est également l'une des sources du pseudo-Albert *De secretis mulierum*, composé vers la fin du XIII^e siècle ou le début du XIV^e: l'ouvrage y est mentionné explicitement avec ce titre, sous le nom d'Avicenne. Cf. *El De secretis mulierum atribuido a Alberto Magno. Estudio, edición crítica y traducción*, éd. J. P. BARRAGÁN NIETO, Fédération Internationale des Instituts d'Études Médiévales, Porto 2012 (Textes et études du moyen âge, 63), p. 328.

le Grand supporte les indices codicologiques venant des manuscrits et sert à établir un terme *ante quem* de la traduction qui doit sans doute avoir été faite avant les années 1250-1260. Cela n'aide pas significativement à la datation car la fourchette chronologique reste assez large, mais signifie que la version n'a pas de relation avec la troisième étape de la réception d'Avicenne, dont il sera question plus loin et qui a occupé le dernier quart du XIII^e siècle.

Des indices plus précis peuvent être distingués en abordant la question de l'anonymat de cette traduction. Il convient d'anticiper que le but des observations que j'avance ci-dessous est premièrement de mettre en lumière la 'complexité d'un cas simple' et de dégager ce qu'il est important de remarquer en parcourant les hypothèses d'attribution, sur la base de l'interprétation des données relevées. Cela au-delà du simple fait d'assigner un nom d'auteur à une traduction, comme une sorte d'étiquette d'attribution qui ne porte pas à terme en soi la tâche véritablement significative de décrire le système de relations dans lequel la traduction a été produite.

L'anonymat de notre version n'est pas un cas exceptionnel, parmi les traductions latines du XII^e et du XIII^e siècle. Des hypothèses d'attribution la reconduisent à l'une ou l'autre des figures de traducteurs connues qui ont eu un lien quelconque avec l'œuvre d'Avicenne et sa réception : Alfred de Sareshel d'une part et Dominicus Gundissalinus de l'autre. Puisque les indices que l'on relève dans le but d'identifier un auteur médiéval — ou un traducteur, comme dans notre cas spécifique — ne sont pas des preuves, mais sont plutôt des points d'appui pour un exercice d'interprétation, j'essaierai de discuter et de vérifier ces deux hypothèses en croisant les données historiques et textuelles qu'on peut mettre à profit.

La tradition manuscrite du *De diluviis*, d'après les œuvres avec lesquelles il a été copié ou transmis, ne fournit pas d'indices véritablement significatifs, mis à part le lien avec le contexte de traduction tolédan d'une très large partie des œuvres copiées dans les *codices*. Il semble que ce texte était lu non seulement dans une perspective physique et ontologique, mais aussi gnoséologique. En effet, il apparaît, sans que cela surprenne, dans des recueils d'ouvrages de philosophie naturelle, il côtoie des traités sur les principes de la nature et sur la complexion et la mixtion (comme le traité *De principiis naturae* de Saint Thomas), ainsi que le *De secretis mulierum*, d'Albert, le *De unitate et uno* de Gundissalinus, mais aussi le commentaire sur les *Meteorologica* d'Alfred de Sareshel et son *De motu cordis* ; le *De diluviis* se trouve aussi régulièrement copié avec des écrits de noétique tels que le *De intellectu* de Fārābī, d'Alexandre et d'al-Kindī, l'écrit *De plurificatione potentialis intellectus* de Gilles de Rome, et le *De intellectu et intelligibili* d'Albert le Grand.

La littérature spécialisée souligne unanimement le fait que le trait caractéristique de l'activité de traduction et de la production de Dominicus

Gundissalinus²⁰ est représenté par l'intérêt pour les sources de la tradition arabe, et notamment judéo-arabe, de la philosophie, sous la possible influence d'Abraham ibn Dawud, plutôt que pour la transmission de l'héritage grec à proprement parler à travers les traductions arabes qui le conservaient. Cet aspect se manifeste clairement dans son activité de traducteur : c'est dans ce sillon de sources et d'intérêts, venant intégrer l'éducation qu'il avait reçu dans ses années d'études dans les *studia* français et notamment à Chartres, que se développe la personnalité philosophique de Gundissalinus et il se démarque comme figure de référence dans la réception de cette même tradition intellectuelle judéo-arabe.

Les traités philosophiques qui lui sont attribués — *De scientiis*, *De divisione philosophiae*, *De anima*, *De unitate et uno*, *De processione mundi* — montrent les liens théoriques étroits entre ses intérêts portant sur la psychologie, l'ontologie, la cosmologie et la logique, son œuvre originelle et ses traductions. Notamment, les doctrines du *Timée* de Platon sont les références de la problématique ontologique et cosmologique de Gundissalinus, qu'on trouve abordée en particulier dans ses *De unitate et uno* et *De processione mundi*, où il se penche entre autre sur les questions de l'ordre et de la composition des éléments, de la dérivation cosmogonique et de la causalité divine. La réception de sources étrangères à la tradition latine représentée par la traduction partielle du *Timée* accompagnée du commentaire de Calcidius — autorités philosophiques puisant dans la tradition juive et arabe, respectivement représentées par le *Fons Vitae* de Shlomo Ibn Gabirol et par la *Métaphysique* du *Šifā'* d'Avicenne, que Gundissalinus a traduit en latin — pourrait inclure de manière tout à fait cohérente la traduction du *De diluviis*. Cette traduction, venant compléter la connaissance et la compréhension de la lecture du *Timée*, devrait alors être située aux alentours des années 1162-1180, pendant le séjour de Gundissalinus à Tolède et l'entreprise de traduction du *Šifā'*,

²⁰ Il traduisit, on le rappelle, des écrits d'al-Kindī, d'al-Fārābī et probablement d'Isaac Israeli, le *Fons vitae* d'Ibn Gabirol, les *Intentions des philosophes* (*Maqāsid al-falāsifa*) d'Al-Ġazālī, outre, bien entendu, la *Métaphysique* du *Šifā'*, une partie de la *Logique* (sur la démonstration), la *Physique* (livres I à III) et le livre sur l'âme. Cf. D. N. HASSE, A. BÜTTNER, *Notes on Anonymous Twelfth-Century Translations of Philosophical Texts from Arabic into Latin on the Iberian Peninsula* (à paraître ; je remercie Dag Hasse de m'avoir envoyé l'article avant la publication) ; D. N. HASSE, *Avicenna's De Anima in the Latin West*, The Warburg Institute - Nino Aragno, London - Torino 2000 ; BURNETT *Arabic into Latin* cit. ; N. POLLONI, *Elementi per una biografia di Dominicus Gundisalvi*, « Archives d'histoire doctrinale et littéraire du Moyen âge », 82, 2015, pp. 7-22. Les œuvres originales de Gundissalinus comprennent : DOMINICUS GUNDISSALINUS, *Tractatus de anima*, éd. J. T. MUCKLE, « Mediaeval Studies », 2, 1940, pp. 23-103 ; DOMINICUS GUNDISSALINUS, *De processione mundi*, M. J. SOTO BRUNA, C. ALONSO DEL REAL éd. et trad., *Coleccion de Pensamiento Medieval y Renacentista* 7, Pamplona 1999 ; DOMINICUS GUNDISSALINUS, *Über die Einteilung der Philosophie / De divisione philosophiae*, A. FIDORA, D. WERNER éd. et trad., *Herders Bibliothek des Philosophie des Mittelalters* 11, Freiburg i. Br. 2007. Pour l'utilisation de doctrines avicennniennes dans les œuvres personnelles de Gundissalinus voir l'article de N. Polloni dans le présent volume.

qui le vit à l'œuvre en collaboration avec Ibn Dawud et Johannes Hispanus. La cohérence avec les thèmes fondamentaux des intérêts de Gundissalinus pourrait également suggérer les raisons du choix des parties du *Šifā* à traduire, négligeant la succession ordonnée des sommes et des livres, et suivant en revanche des critères d'ordre doctrinal. La traduction isolée du *De diluviis*, qui serait donc le seul chapitre de la *Météorologie* à avoir été traduit dans le cadre d'un projet de réception, ne surprendrait alors pas, comme c'est le cas pour le livre *De l'âme*.

Deux difficultés principales viennent compliquer l'interprétation du tableau. La première est que le *De diluviis* n'est jamais mentionné dans les écrits de Gundissalinus. En second lieu, si on s'approche du texte, on remarque que le *De diluviis* n'est pas une traduction suivie et complète, bien qu'elle ne soit pas non plus classable comme une paraphrase : le trait le plus distinctif lui vient du fait que des passages sont fréquemment et librement raccourcis et d'autres sont omis lorsque le traducteur les considère visiblement superflus pour la compréhension de l'intention du texte. Cet aspect à la fois confirme le but de la version et se justifie en raison de celui-ci, c'est-à-dire du fait que l'intention de la traduction n'est pas, en première instance, de traduire Avicenne mais de rendre disponible un écrit utile à l'interprétation d'un objet textuel donné, notamment une source faisant autorité au sujet de la science naturelle, de la cosmologie, et de la connaissance de la nature de l'âme humaine. Mais ce trait est aussi un facteur caractérisant de la technique de traduction. Dominicus Gundissalinus est d'ordinaire un traducteur fidèle et littéral, qui n'abrège pas son modèle et ne s'éloigne pas de la traduction mot à mot ; cependant deux exceptions à cette règle peuvent être mentionnées : la traduction de l'*Énumération des sciences* d'al-Fārābī, dont l'attribution est certaine²¹, et les deux derniers chapitres de la *Métaphysique* du *Šifā*, qui sont abrégés en raison de leur caractère « islamique »²². Le *De diluviis* pourrait venir s'ajouter à celles-ci.

À ce propos, on remarque que les raccourcis rappellent le mode de travail d'Alfred de Sareshel, que l'on constate dans son *De mineralibus*, sous la forme d'une extrême synthétisation de la formulation d'une phrase et de l'intervention sur son modèle, en adaptant et remaniant des passages. Toutefois, il me semble que mis à part le fait d'être deux traductions faites *ad hoc*, les motivations doctrinales et l'intention textuelle auxquelles répond la version du *De diluviis* semblent s'éloigner un peu de celles qui caractérisent l'œuvre d'Alfred. Ce dernier n'était certes pas étranger aux lectures philosophiques fondamentales comme le

²¹ D. N. HASSE, *Abbreviation in Medieval Latin Translations from Arabic*, dans R. WISNOVSKY, F. WALLIS, F. C. FUMO, C. FRAENKEL éd., *Vehicles of Transmission, Translation, and Transformation in Medieval Textual Culture*, Brepols, Turnhout 2011, pp. 159-172.

²² Cf. BERTOLACCI, *The reception of Avicenna* cit.

Timée, qui figure parmi les sources de son commentaire au *De plantiis* et du *De motu cordis*²³. Néanmoins, ses intérêts doctrinaux et son activité de traduction, liée au programme de Gérard de Crémone, ne s'écartent pas de l'œuvre d'Aristote et de sa réception. La traduction du *De diluviis* serait une version accidentelle, faite *en passant*, occasionnée par la maîtrise et le recours du traducteur au *Šifā'* en tant que source pour la connaissance et l'interprétation d'Aristote, et notamment de sa *Météorologie*. De plus, sur le plan textuel, même si le *De diluviis* est un chapitre assez court n'offrant pas une riche base stylistique et terminologique de comparaison sur laquelle fonder des conclusions irréfutables, il ne montre aucune ressemblance évidente avec les habitudes marquant les traductions d'Alfred.

Entre les deux protagonistes, l'habitude et la technique du raccourci et des abréviations textuelles pourrait faire entrer en scène un autre traducteur, Michel Scot (1175 ca-1236)²⁴. Bien que ce dernier ait été impliqué particulièrement dans la transmission des commentaires d'Averroès, il faut rappeler que la première phase de son activité est liée à la cathédrale de Tolède, aux sources disponibles dans sa bibliothèque et à l'entreprise de traduction qu'y était menée. À Tolède, où il est peut-être arrivé vers 1200, Michel Scot a traduit le *De motibus caelorum* d'Al-Bitrūḡī en 1217 et le *De animalibus* d'Aristote ; cette dernière traduction n'est pas datée mais elle doit avoir été complétée avant le départ de l'auteur pour l'Italie, vers 1220²⁵. C. Burnett a souligné la continuité probable de la version du *De animalibus* avec le programme de traduction d'Aristote de Gérard de Crémone, qu'elle complète venant après les livres sur les météores et les plantes qui avaient fait l'objet du travail d'Alfred de Sareshel²⁶. Dans ce même contexte géographique et chronologique semble devoir se situer également la traduction du *De animalibus* du *Šifā'*, qui n'avait pas été traduit par Gundissalinus et ses collaborateurs et dont la lecture complétait le travail de Michel Scot sur le traité d'Aristote. La dédicace à l'empereur Frédéric II qui accompagne cette version dans les témoins conservés a sans doute pu avoir été ajoutée par la suite, par le traducteur lui-même. Pour revenir donc aux abréviations textuelles, l'une des caractéristiques relevées dans les traductions des commentaires d'Averroès par Michel Scot sont les raccourcis et les omissions de phrases ou de brefs paragraphes contenant des informations considérées superflues et négligeables pour la compréhension du texte, sans pour autant que ce dernier soit résumé ou paraphrasé²⁷. Ces traits

²³ Cf. Nicolaus Damascenus *de Plantis Five Translations* cit.

²⁴ D. N. HASSE, *Latin Averroes Translations of the First Half of the Thirteenth Century*, Olms, Hildesheim 2010.

²⁵ C. BURNETT, *Michael Scot and the Transmission of scientific Culture from Toledo to Bologna via the Court of Frederick II Hohenstaufen*, « Micrologus », 2, 1994, pp. 101-126.

²⁶ BURNETT, *The Coherence* cit., p. 262.

²⁷ Cf. HASSE *Abbreviation in Medieval Latin Translations* cit.

caractéristiques se retrouvent dans le *De diluviis* qui est un texte sensiblement plus court que l'original et plus facilement lisible, en raison des coupures qui en conservent les points cruciaux de l'argumentation. Cet aspect, à côté du lien indiscutable avec les entreprises de traduction tolédanes, porterait à identifier Michel Scot comme possible traducteur. Sous une perspective textuelle, les recherches récentes de Dag N. Hasse²⁸, visant à l'identification des traducteurs des versions anonymes du XII^e siècle par une approche philologique basée sur la stylométrie computationnelle comparant, à l'aide d'un logiciel, des particules de liaison, de conjonctions, des mots et des locutions brèves caractéristiques d'un auteur, semblent supporter cette possibilité d'attribution (tandis que en ce qui concerne les deux autres traducteurs, Alfred et Gundissalinus, les indices philologiques sont respectivement nuls et très faibles). Il faut rappeler, toutefois, que la base textuelle représentée par le *De diluviis* est assez réduite et de ce fait les correspondances relevées ne peuvent pas, à mon avis, être considérées comme une preuve absolument concluante, mais elles représentent un indice de plus supportant l'enquête historique et textuelle.

En résumant les éléments relevés, la traduction du *De diluviis* montre une dépendance bien distincte de la réflexion cosmologique et ontologique caractérisant le milieu culturel tolédan de la fin du XII^e siècle. Par cet aspect doctrinal, elle s'insère de manière tout à fait cohérente dans le projet intellectuel de Gundissalinus, tels qui le dévoilent à la fois ses écrits personnels et les traductions qu'il a accomplies. Aussi, l'attribution à Gundissalinus permettrait d'expliquer le choix des parties du *Šifā'* à traduire et le caractère discontinu de la réception. Il resterait à expliquer pourquoi le *De diluviis* a été transmis seul sans un lien explicite avec les traductions des autres parties du *Šifā'* par Gundissalinus et sans l'attribution à ce dernier. Le lien avec le milieu tolédan est aussi le dénominateur commun des deux autres hypothèses d'attribution, renvoyant à Alfred de Sareshel ou à Michel Scot, bien qu'avec des enjeux doctrinaux motivant la traduction bien moins solides par rapport à ceux qui ont été relevés à propos de Gundissalinus. Dans les deux cas le *De diluviis* serait une version collatérale qui ne se justifierait pas par la cohérence avec un projet intellectuel personnel. En ce qui concerne Alfred de Sareshel, la traduction du *De diluviis* serait la conséquence accessoire de sa connaissance du *Šifā'* supportant son activité de traducteur d'Aristote et de commentateur. Quant à Michael Scot, la continuité avec l'activité de traduction de ses proches prédécesseurs est le facteur qui semblerait expliquer ses versions tolédanes, sous une perspective regardant conjointement aux deux axes de l'activité de traduction du XII^e siècle, autour de Gérard de Crémone, pour la réception d'Aristote, et autour

²⁸ Cf. HASSE, *Notes on Anonymous* cit. (voir note n. 20).

de Dominicus Gundissalinus, pour la réception d'Avicenne. Il est plausible que Scot, accoutumé à la lecture du *Šifā'* en tant que complément à celle d'Aristote — comme le montre sa traduction du *De animalibus* — ait été poussé à rendre accessible à ses contemporains le *De diluviis*, une autre partie cruciale de l'œuvre d'Avicenne qui n'avait pas fait l'objet de l'activité des traducteurs auparavant. En vertu de cette hypothèse d'attribution, la traduction serait un peu plus tardive et devrait être située dans les deux premières décennies du XIII^e siècle.

3) La troisième phase de réception de la cinquième partie de la physique du *Šifā'* prend forme dans le cadre de la reprise et de l'achèvement, dans la seconde moitié du XIII^e siècle, de l'entreprise de traduction de l'ouvrage d'Avicenne par Gundissalinus et ses collaborateurs, remontant au siècle précédent²⁹.

Nulle mention n'est faite, dans l'unique manuscrit conservant la traduction (ms. Urb. Lat. 186), des raisons qui ont motivé l'entreprise. L'évêque Gonzalo Perez (Garcia) Gudiel (1238/39-1298)³⁰ est la figure charnière de la mise en œuvre du projet de traduction des livres naturels du *Šifā'* — et de retraduction, pour les versions partielles qui existaient déjà en latin — qu'il a commandité à Juan Gonzales de Burgos et à un certain Salomon. Natif de Tolède, où il a reçu sa première éducation mozarabe, il étudia sans doute à Paris dans les années 1252-58, où il obtint le titre de *magister artium* en 1259; ayant quitté Paris, il fut actif à l'université de Padoue dans les premières années 1260. Chanoine et archidiacre de la cathédrale de Burgos et puis de Tolède, il fut nommé évêque de Burgos en 1275 et successivement archevêque de Tolède en 1280, en complément d'une carrière internationale de renommée qui l'amena notamment en Italie, à plusieurs reprises, au sein de la curie papale. L'œuvre d'Avicenne figure parmi les livres appartenus à Gonzalo Perez Gudiel, déjà dans une liste de 1273³¹. La physique était une somme du *Šifā'* dont l'importance et l'intérêt étaient majeurs, et dont la traduction latine était largement lacunaire³². Les deux traducteurs chargés par l'évêque reprurent le travail là où Ibn Dawud et Dominicus Gundissalinus s'étaient arrêtés et traduisirent les parties qui n'étaient pas accessibles à la lecture en latin: *Physique III* (les trois derniers chapitres du livre III et le livre IV n'ont fait l'objet d'aucune traduction latine), *De generatione et corruptione*, *De*

²⁹ Cf. l'article de Jules Janssens dans le présent volume.

³⁰ F. J. HERNÁNDEZ, P. LINEHAN, *The Mozarabic Cardinal. The Life and Times of Gonzalo Pérez Gudiel*, SISMEL-Edizioni del Galluzzo, Firenze 2004. Voir également, *Avicenna latinus, Liber tertius naturalium. De generatione et corruptione*, éd. S. VAN RIET, Peeters - Brill, Louvain la Neuve - Leiden 1987, p. 65 ss.

³¹ Cf. HERNÁNDEZ, LINEHAN, *The Mozarabic Cardinal* cit., p. 481.

³² A propos de l'intérêt accordé aux différentes parties du *Šifā'* par les traducteurs et aux choix de traduction, on rappelle que la traduction de la *Logique* est aussi largement lacunaire (une seule section a été traduite en latin; cf. *supra*, p. 333 et p. 339, n. 20); les *Mathématiques* ont été complètement négligées.

actionibus et passionibus, et *Météorologie*³³, dont ils traduisirent aussi, à nouveau, les chapitres qui circulaient déjà dans les deux traductions-adaptations rédigées au siècle précédent. La double traduction de ces seules parties confirme le fait que leur première version latine était clairement perçue comme indépendante et disjointe de l'œuvre d'Avicenne et de sa traduction de référence, et que comme telle elle circulait, sans que nos traducteurs en tiennent le moindre compte³⁴.

Les noms des traducteurs et du commanditaire sont explicitement documentés dans le ms. Urb. Lat. 186 (f. 83r), le seul exemplaire connu de cette traduction complète, dans l'*explicit* du premier livre des livres naturels et l'*incipit* du deuxième livre. L'attribution à ces mêmes traducteurs des autres livres est discutée et démontrée par Alonso Alonso³⁵. Voici le texte :

«Explicit Liber sufficientiae phisicorum Avicennae translatus a magistro Johanne Gunsalvi de Burgos et Salomone de arabico in latinum. Ad preceptum reverendissimi patris ac Domini Domini Gunsalvi episcopi Burgensis qui est civitas in Hispania.

Sequitur ac incipit eiusdem Avicennae liber De caelo et mundo. Ab eodem magistro Iohanne Gunsalvi de Brugis [sic] translatus et dicitur secundus naturalium ».

En tant que telles, ces notes de clôture (du premier livre) et de début (du deuxième livre) risquent de ne représenter qu'un passage de l'inconnu à l'inconnu car les deux personnages mentionnés en tant que traducteurs ne sont connus qu'en relation à cette version et le fait de pouvoir les nommer ne représente pas, en soi, un élément significatif. Si on interprète les informations à propos de cette entreprise en les combinant avec les indications venant du manuscrit et avec des indices indirects, toutefois, il est possible d'avancer quelques considérations. Gonzalo Perez Gudiel a été évêque de Burgos entre 1275 et 1280 et c'est donc pendant les années où il recouvrait cette charge que la traduction a été effectuée. On sait qu'il séjourna en Italie, auprès du pape, pendant les trois dernières années de cette période. La précision à propos de la localisation de la ville de Burgos, dans le manuscrit, pourrait indiquer que la traduction a été faite à l'intention des interlocuteurs italiens de l'évêque, pendant l'un de ses séjours dans la péninsule, et réduire encore plus l'intervalle chronologique de sa production, entre 1277 et 1280. Toutefois, il est aussi possible que la précision géographique soit un ajout plus tardif, œuvre d'un copiste postérieur.

³³ Une traduction de la section botanique est attestée, dont l'attribution est incertaine. Cf. BERTOLACCI, *The reception of Avicenna* cit.

³⁴ Est-il envisageable que l'évêque Gudiel, étant donné le contexte de sa formation, et la circulation et la fortune notables des deux traductions indépendantes n'en ait pas eu connaissance ?

³⁵ Cf. ALONSO ALONSO, *Las traducciones* cit.

Si la ville de Burgos est bien le lieu de la traduction, elle l'est en tant que pôle satellite de Tolède : c'est de Tolède, de son projet et de sa bibliothèque, que vient l'intention de la traduction ; celle-ci est véhiculée par l'évêque Gonzalo Perez Gudiel, un personnage très bien inséré, par ses ancêtres évêques, sa formation, ses intérêts intellectuels et sa carrière, dans la vie culturelle de la cathédrale et dans le contexte doctrinal de son époque. Sa vie l'a amené dans les centres culturels les plus importants de Tolède, Paris, Padoue où il est entré en contact avec Albert le Grand, Thomas D'Aquin et peut-être Guillaume de Moerbeke, et a constitué sa bibliothèque. La traduction est donc sans doute, par la figure de son commanditaire, un produit de l'écho du projet de traduction du siècle précédent, mais elle indique également que dans le dernier quart du XIII^e siècle l'intérêt pour Avicenne et notamment pour ses écrits physiques jouissait d'une certaine vitalité. Cependant, somme toute, le caractère de la commande était marginal, à côté de l'exploit de la réception des commentaires d'Averroès, qui marque le changement du climat philosophique et des sources qui attirent l'intérêt des intellectuels. La circulation de cette traduction a été manifestement très limitée et son influence a été, pour ce qu'on est en mesure d'affirmer sur la base des connaissances actuelles, pratiquement nulle.

APPENDICE. LE MS. URB. LAT. 186 ET LA COPIE QU'IL CONTIENT³⁶

Le manuscrit est une copie assez tardive, coûteuse et soignée, en deux volumes (Urb. Lat. 186 et 187), faite pour le duc d'Urbain Frédéric de Montefeltre et donc datable entre 1474 et 1482³⁷. Le ms. Urb. Lat. 186 contient la traduction de Juan Gonzales de Burgos et Salomon de la philosophie naturelle du *Šifā'* : *Physique, De celo et mundo, De generatione et corruptione, De actionibus et passionibus, et Liber Metheorum*. Le second volume contient la traduction de la *Métaphysique* et du *De anima* par Gundissalinus et ses collaborateurs, et celle du *De animalibus* par Michel Scot.

En concentrant l'attention sur la *Météorologie*, la subdivision du texte correspond à celle de l'arabe, en deux livres : le premier consacré à *Ce qui se passe à la surface de la terre* et le second *Sur les événements et les êtres inanimés, au-dessus de la terre*. La seule différence concerne la division en chapitres du deuxième livre : 8 chapitres au lieu de 6 dans l'édition arabe (le troisième chapitre, sur le

³⁶ Cet appendice présente certains traits caractéristiques du texte de la traduction du XIII^e siècle, qui ont été remarqués durant la lecture et l'étude des textes arabe et latin menées, depuis 2010-2011, en collaboration avec Jean-Marc Mandosio, dans le cadre de ses séminaires tenus à l'École Pratique des Hautes Études. Cf. aussi les résumés annuels des conférences dans l'Annuaire de l'École Pratique des Hautes Études : <http://ashp.revues.org/1297>.

³⁷ Voir la description codicologique dans *Avicenna Latinus: codices*, p. 86.

halo et l'arc-en-ciel, et le cinquième, sur le tonnerre, l'éclair, les étoiles filantes, comportent chacun, en latin, une césure). Cette différence est certainement survenue pour des raisons mécaniques au cours de la tradition latine, et non pas pour une volonté éditoriale; et l'hypothèse qui admettrait le témoignage d'une tradition textuelle différente, arabe ou latine, est à exclure. Notamment, dans le modèle de notre manuscrit, où le texte était suivi, une glose marginale — une rubrique — indiquait le contenu de la partie de texte en question, peut-être la désignant comme un « *capitulum* ». Or cette glose est rentrée arbitrairement dans le texte. Notre copiste s'est aperçu de la glose après avoir déjà copié le début de la phrase correspondant au début de la section: il a donc exponctué le texte qu'il avait déjà copié et a inséré ce qui se trouvait dans la marge, qui finit par devenir le titre du nouveau chapitre.

Une cause matérielle est à envisager aussi à propos de l'autre, unique, différence textuelle: une longue lacune au début du dernier chapitre du second livre, sur les événements remarquables qui surviennent dans le monde (*De diluviis*). L'omission correspond à environ 16 lignes de texte dans l'édition arabe, soit à peu près 25 lignes de latin, si on établit une proportion entre l'édition et le manuscrit. Aucun signe dans le manuscrit n'indique la lacune ou interrompt la continuité de la copie: certainement il s'agit d'un manque, très probablement matériel, qui affectait déjà le modèle de notre manuscrit sans y être signalé.

Le texte conservé est très corrompu: la stratification d'erreurs mécaniques et interprétatives, pour ne parler que des corruptions dues à la copie et à la transmission, a parfois déformé amplement le texte en le rendant incompréhensible. Ce qui implique, au cours du travail d'édition, des réajustements non négligeables afin de restituer un texte le plus légitimement proche du travail du traducteur.

Notre copiste est tout à fait passif, par rapport à sa tâche: il ne semble pas se soucier de l'intelligence du texte qu'il copie et il n'est pas enclin à l'intervention. Il n'est évidemment pas possible d'évaluer la lisibilité et la qualité de son modèle, et donc la qualité de son propre déchiffrement, mais la copie contient de très nombreuses mélectures qui rendent pénible la lecture de la traduction (*altus* > *alius*; le frottement, *fricatio* > *frigidatio*; un obstacle qui dévie un vent, dans sa montée, *impediens* > *patiens*; le violet, *yndus*, c'est-à-dire indigo, devient vert, *viridis*, ou est confondu avec *iris*, l'arc-en-ciel; l'horizon, *orizon*, devient l'orient, *oriens*; *signatus* devient *sic natus*). Si ces erreurs étaient déjà présentes dans son modèle, le copiste ne s'est pas efforcé de les corriger, alors que certaines auraient pu être rectifiées à partir du contexte.

Dans le quatrième chapitre du second livre (sur les vents) on croise un terme qui a posé beaucoup de problèmes aux copistes latins car il ne se lit jamais dans sa forme présumée correcte, qu'on peut reconstituer grâce à l'arabe. Notre copiste

confirme son attitude inclusive, insérant dans le texte toutes les variantes qu'il trouve dans son modèle, au lieu de trancher : il s'agit des *vents des nuages*. C'est ainsi qu'on nomme les vents qui rassemblent des nuages ou qui, heurtant un nuage, deviennent très forts et prennent la forme de tourbillons. La probable traduction *venti nubales* se trouve corrompue sous les formes : *venti murales* (*venti autem generantes nubem dicuntur venti murales*, f. 167v), *minerales*, *minerales murales*, *murales montuales*.

En ce qui concerne la traduction, un trait caractéristique assez récurrent, sont les doubles traductions : des variantes de traductions précisant la sémantique d'un terme. Cet aspect révèle peut-être une certaine inexpérience des traducteurs³⁸, mais répond aussi à une intention explicative. En est un exemple, dans le deuxième chapitre du second livre, la traduction de *mušaff* (مشف, « transparent, diaphane »), qui est toujours double et non systématique : *pervium diafanum*, *clarum sicut cristallum*, et *clarum et pervium*, dans l'espace de deux lignes (f. 162r). Dans le chapitre successif, sur le halo et l'arc-en-ciel, on trouve : *pervium lucidum*, *luciditatem* (إشفاف, *išfāf*), *clarum luminosum* (شاف, *šāf*).

Si les noms de ville ont posé une difficulté aux traducteurs, qui les lisent mal (par exemple, le nom de la ville de Tūs, توس, devient *qaws*, قوس, « arc ») ou jugent opportun, puisqu'ils sont inconnus des Latins, de les remplacer par une vague indication (*in quodam monte*, f. 165r), ils ne cherchent pas systématiquement à dissimuler les traits arabisants du texte, notamment les noms de vents ou de phénomènes optiques. Les noms des villes sont négligeables et c'est le concept qui compte, alors que les noms des phénomènes météorologiques relèvent de la terminologie spécifique de cette science et ne sont pas altérés. Le résultat a représenté un écueil majeur pour les copistes qui se trouvaient face à des mots inconnus et à une orthographe à deviner. Ceci a donné lieu à de faciles altérations successives le long de la tradition. C'est le cas par exemple, parmi les représentations visuelles qui se produisent dans le ciel, des *nayāzik* (نَيَازِك, « lances, barres ») qui partent du soleil³⁹. Le mot était certainement transcrit et est devenu dans notre copie *vicath* par corruptions successives. Les traducteurs savaient très bien de quel phénomène il s'agissait et ils l'avaient expliqué à travers une addition : *Sed colores (*columnae) qui apparent in caelo qui dicuntur vicath sunt etiam ymaginationes* (f. 166r, أما النيازك فإنها أيضا خيالات). Le mot *columnae* est une reconstruction éditoriale (l'astérisque indique une conjecture) car dans aucune occurrence, dans la traduction, il apparaît correctement transmis, mais

³⁸ Cf. ALONSO ALONSO, *Las traducciones* cit., pour l'analyse des caractéristiques terminologiques des traducteurs et notamment l'emploi de termes castillans ou des locutions particulières.

³⁹ Cf. ARISTOTE, *Météorologiques*, III, 6, où sont décrites des sortes de barres lumineuses apparaissant à droite ou à gauche du soleil.

on le trouve corrompu en *calores profundi* (f. 161r), *color ris profundi* (f. 161r), ou *colores* (f. 166r), et ce cumul de corruptions a rendu le passage complètement obscur, en latin.

La translittération, toutefois, n'est pas la norme et le plus souvent les traducteurs se limitent à traduire en latin un terme spécifique; c'est le cas par exemple des parhélies (*šumaysāt*, شميسات), un autre phénomène optique pris en compte par Avicenne dans le chapitre sur le halo et l'arc-en-ciel, qui consiste en deux répliques de l'image du soleil, placées horizontalement de part et d'autre de celui-ci, sur une circonférence et que les traducteurs ont probablement rendu par **soles*, d'après la racine du mot arabe. Ce terme se trouve corrompu en : *dali* ou *delii* (f. 166r).

ABSTRACT

The three Latin translations of Avicenna's Meteorology: notes for the history of the text

The present article deepens the perspective of the paper presented at the conference 'A Crossroad between East and West. The Latin Mediaeval Translations of the Kitāb al-Šifā' (Book of the Cure) of Ibn Sīnā (Avicenna)' (Pisa, 2015). It aims to take the Latin tradition of the *Meteorology*, through its different and discontinuous steps of translation, as an observation point to remark some characteristic aspects of the reception of Avicenna's *libri naturales* and of the *Meteorology* among them. As a corollary, the analysis on the place of the *Meteorology* reception underlines the role of Avicenna's text as an authoritative reference of Aristotelianism, supporting the reading and the interpretation of Aristotle and of the ancient sources.

Concerning the phases of the *Meteorology* reception into Latin, the paragraph devoted to the discussion on the authorship of the anonymous translation of the *De diluviis* aims to verify the hypothesis of attribution, and to examine some significant elements of the doctrinal context and the intention behind the translation, in order to clarify at least part of the system of relations that the translation can reveal. The presentation of some textual and terminological aspects characterising the third phase of translation, through a comparison between the Latin and the original Arabic showing the work of the translators, occupies the last part of the article.

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ELISA RUBINO

The Commentary of Alfred of Shareshill on the Pseudo-Aristotelian *De mineralibus*

The repertory of the works known to have been written by Alfred of Shareshill, a leading figure in English intellectual culture at the beginning of the 12th century, contains seven items: the treatise *De motu cordis*¹; the translation of Nicholas of Damascus's *De plantis* with a corresponding commentary²; a commentary on the four books of Aristotle's *Meteorologica*³; and, finally, a commentary on the *De mineralibus*, a short abstract from the mineralogy of Avicenna's *Kitāb al-Šifā'* that Alfred selected, translated into Latin, and commented upon⁴. All of these commentaries appear in the form of a more or less extensive marginal gloss.

These texts are currently available in modern editions, except for the commentary on *De mineralibus*, which still remains unedited. The present article provides a description of this text.

A commentary beginning with the words *A luto igitur viscoso* was identified in 1993 by James K. Otte, a renowned specialist in Alfredian studies⁵, in the last folios of the manuscript Oxford, Bodleian Library, Selden supra 24 (ff. 113r-114v). Otte limited himself, however, to a synthetic description and did not follow through to present a complete edition of the text, which was almost impossible

¹ ALFREDUS ANGLICUS, *De motu cordis*, hrsg. von C. BAEUMKER, «Beiträge zur Geschichte der Philosophie des Mittelalters», 23, Münster i. W. 1923.

² NICOLAUS DAMASCENUS, *De plantis. Five translations*, edd. H. J. DROSSAART LULOFS, E. L. J. POORTMAN, Amsterdam, North-Holland 1989 (Aristoteles Semitico-Latinus); R. J. LONG, *Alfred of Sareshel's Commentary on the Pseudo-Aristotelian De plantis: a Critical Edition*, «Mediaeval Studies», 47, 1985, pp. 125-167.

³ J. K. OTTE, *Alfred of Sareshel's Commentary on the Metheora of Aristotle. Critical Edition, Introduction, and Notes*, Brill, Leiden - New York - København - Köln 1988.

⁴ AVICENNA, *De congelatione et conglutinatione lapidum, Being Sections of The Kitāb al-Šifā'. The Latin and Arabic Texts*, edited with an English translation of the latter and with critical notes, edd. E. J. HOLMYARD, D. C. MANDEVILLE, Geuthner, Paris 1927; *De mineralibus*, transl. ALFREDI SERESHLENSIS, ed. R. FRENCH, in Id., *Teaching Meteorology in Thirteenth-Century Oxford: The Arabic Paraphrase*, «Physis. Rivista Internazionale di Storia della Scienza», 36, 1999, pp. 99-129; E. RUBINO, *Il De mineralibus di Avicenna tradotto da Alfredo di Shareshill*, «Bulletin de philosophie médiévale», 58, 2016, pp. 23-87.

⁵ J. K. OTTE, *Alfred of Sareshel's Commentary on Avicenna's De congelatione et conglutinatione lapidum*, in G. FREIBERG ed., *Aspectus and affectus: Essays and Editions in Grosseteste and Medieval Intellectual Life in Honor of Richard C. Dales*, New York, AMS Press 1993, pp. 105-111.

at the time due to the serious deterioration of the last part of the codex. The folios in this section are in fine battered parchment, but are so gravely damaged — especially by water stains, tears and wide abrasions — that they still appear «in an abominable condition», to quote Otte's words⁶.

Although the condition of the codex has not changed, techniques for its reproduction have considerably improved. In fact, thanks to a series of digitisations of the manuscript under UV light, made kindly at my request by the staff of the Bodleian Library (Imaging Services), it is now possible to attempt, upon careful reading, an edition of these glosses. It is surely not possible to read the whole text, especially the last gloss located on the left, irremediably abraded, margin. Nor will it be possible in the future to reconstruct the contents of the penultimate folio of the codex (between the actual ff. 113 and 114), which was lost centuries ago⁷, mainly due to the lack of analogous witnesses. However, I believe that at least an attempt to publish this text is needed today.

The Bodleian glosses contain, in fact, the first known medieval commentary on the *De mineralibus* and represent, together with the commented text, an important step in the scientific study of mineralogy. In Alfred's work, deeply marked by the new science that came from the Arabic world — to which he had first-hand access — stones and minerals were, for the first time in the Middle Ages, no longer regarded only as instruments of superstition or mere pharmacopoeia, but rather interpreted to be a result of physical processes that can be examined in scientific terms. In the scientific culture of the 13th century, in which natural phenomena were being studied increasingly more through direct observation and rational analysis than through imaginary beliefs, Alfred played a pivotal role in rediscovering and diffusing Aristotelian or pseudo-Aristotelian texts, which turned out to be crucial for the further development of medieval scientific thought.

With the edition of the glosses on the *De mineralibus*, Alfred of Shareshill's entire legacy is now made available to the public⁸.

THE MANUSCRIPT TRADITION AND TEXTUAL PROBLEMS

The commentary on *De mineralibus* is not an isolated work, but belongs within the wider context of the so called *Liber metheororum*⁹, a collection which

⁶ OTTE, *Alfred of Sareshe's Commentary on Avicenna's cit.*, p. 107: «Some pages are smudged, others are illegible because the writing of the reverse side shows through. Even an examination using an ultraviolet lamp met with little success».

⁷ This fact has gone unnoticed by scholars.

⁸ In his commentary on *Meteorologica*, Alfred mentions another of his works: a commentary on *De generatione et corruptione*. This text has not been found.

⁹ E. RUBINO, *Alfredo di Shareshill editore della Meteorologia aristotelica*, «Giornale critico della filosofia italiana», 94, 2015, pp. 479-496.

Alfred composed around 1190 and which had the merit of spreading Aristotelian meteorology in the Middle Ages. Alfred put together the translation from Arabic into Latin by Gerard of Cremona (†1187) of the books I-III of Aristotle's *Meteorologica*, with the translation from Greek into Latin by Henricus Aristippus (†1162) of book IV; and, at the end, he added the *De mineralibus*, a short treatise on mineralogy, which he himself compiled based on two chapters (I, 1 e I, 5 of *fann V*) from Avicenna's *Kitāb al-Šifā'*, translated from the original Arabic¹⁰.

This compilation was then commented upon by Alfred in a systematic way, initially in the form of marginal glosses. The main witness of this work is the already mentioned codex Oxford, Bodleian Library Selden supra 24, which, according to Otte, provides a more or less faithful reproduction of the Alfredian archetype in its original *facies*, consisting of text in the middle of the page with a marginal contour commentary. In the case of the commentary on books I-IV of the *Meteorologica*, the gloss was subsequently transformed into a continuous text, and it is preserved by two other manuscripts in this form¹¹. This was not, however, the case for the *De mineralibus*, to which there are no known witnesses other than the Bodleian codex.

One should not assume, however, that the fortune of this last text is restricted only to the Bodleian manuscript, since there are copious traces of a circulation of glosses that were attributed to Alfred, and that in some cases seem to stem from a text even more complete than that of the Bodleian manuscript. Among them, let us focus on two documents that are already known to scholars thanks to the identification made by Otte¹²:

1) the unedited commentary on the *Liber metheororum* by Adam of Bockenfield (or Bockfeld), in which the author mentions glosses, attributed to «Al.» or

¹⁰ A. BERTOLACCI, *A Community of Translators: The Latin Medieval Versions of Avicenna's Book of the Cure*, in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning. Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*, Brepols, Turnhout 2011, pp. 37-54: pp. 43-44, 50-51; AVICENNA (IBN SĪNĀ), *Libro della guarigione. Le cose divine*, ed. A. BERTOLACCI, UTET, Torino 2008, pp. 11-18, 26-30, 80-83. RUBINO, *Il De mineralibus* cit.; J.-M. MANDOSIO, *Follower or Opponent of Aristotle? The Critical Reception of Avicenna's Meteorology in the Latin World and the Legacy of Alfred the Englishman*, forthcoming; J.-M. MANDOSIO, C. MARTINO, *La Météorologie d'Avicenne (Kitāb al-Šifā' V) et sa diffusion dans le monde latin*, « *Miscellanea mediaevalia* », 33, 2006, pp. 406-424. A third section of *fann V* of Avicenna's *Šifā'* (chapter II, 6) was also translated into Latin with the title of *De Diluviis in Thimaeum Platonis*: on the translation of this section, see the article of Silvia Di Donato in the present volume; on Michael Scot as author of this translation, see D. N. HASSE, *Notes on Anonymous Twelfth-Century Translations of Philosophical Texts from Arabic into Latin on the Iberian Peninsula*, in D. N. HASSE, A. BERTOLACCI eds., *The Arabic, Hebrew and Latin Reception of Avicenna's Physics and Cosmology*, De Gruyter, Berlin (Scientia Graeco-Arabica), forthcoming.

¹¹ Mss.: Durham, Chapter Library, C. III, 11v-18r and Paris, Bibliothèque Nationale, Latin 7131, 82v-85r. Cf. OTTE, *Alfred of Sareshel's Commentary on the Metheora* cit., pp. 31-33.

¹² *Supra* n. 5.

«Aluur'», that have been only partially included in the Bodleian codex. Adam's testimony is, however, rather ambiguous, since he cites Alfred in a synthetic and non-literal way;

2) the manuscript Vatican, Urb. lat. 206, ff. 253v-254r, which, under the attribution «Alf.» preserves quotations of the glosses on the *De mineralibus*, likely extracted from Alfred's text in the Bodleian codex, and other Alfredian fragments that do not trace back to it.

To these two documents, a third one must be added, which I identified during the investigation on the manuscripts of the *Liber metheororum* preliminary to the edition of the Latin translation of the IV book of the *Meteorologica* (Aristoteles Latinus X.1)¹³. This third testimony is the manuscript Leipzig, University Library, 1392, containing the *De mineralibus*¹⁴ along with marginal Alfredian glosses marked by «Al.». Also here, as in the case of the Urb. lat. codex, there are some fragments attributed to Alfred which do not correspond to the Bodleian manuscript¹⁵.

Finally, a fourth useful source is Albert the Great's *Mineralia*, in which there are two passages, in particular, where the author — albeit non quoting explicitly Alfred — seems to show some knowledge of the Alfredian commentary. The following table provides a synopsis of Albert's and Alfred's relevant texts: text of *De mineralibus* to which glosses refer are in square brackets and passages that show a clear connection between the two authors are marked in italics.

¹³ ARISTOTELES, *Meteorologica: Liber quartus. Translatio HENRICI ARISTIPPI*, ed. E. RUBINO, Brepols, Turnhout 2010 (Aristoteles Latinus X.1).

¹⁴ ARISTOTELES, *Meteorologica: Liber quartus* cit., p. XIII.

¹⁵ *Infra* pp. 359-362.

ALBERTUS MAGNUS, *Mineralia, Opera omnia*, ed. A. BORGNET, Paris 1890, vol. 5, pp. 1-116.

(1) Causa vero efficiens lapidum ab omnibus fere qui sermonem de lapidibus fecerunt, dicitur esse *virtus mineralis*. Cum autem haec virtus communis sit tam in lapidibus quam in metallis omnibus operans, insufficienter videbitur esse assignata causa lapidum efficiens [...] (Liber I, Tractatus I, Caput IV, 5)

Post lapidum autem cognitionem ponimus tractatum de metallis: quia sicut diximus, *lapis semper fere invenitur locus generationis esse metallorum* (Liber III, Tractatus I, Caput I, 59)

(2) Et tales aquas que virtute et non actu habent qualitates diversorum elementorum, supra modum student facere alchimici, ut per eas exsiccet et coagulent hoc quod volunt transmutare: propter hanc causam habent *libros de XII aquis conscriptos* (Liber I, Tractatus I, Caput IX, 13)^a

^a *Infra* n. 17

ALFREDUS ANGLICUS, *Glossae super De mineralibus*, *infra* pp. 10-11.

[*discontinuantur subito virtute (minerali) quadam que exit a terra in hora terremotus*] Hoc fit ad similitudinem generationis metallorum ...

(Glossa V)

[*lac virginis estque eius*] qualiter autem et ex quibus lac virginis et cetera coagulantia componantur, in libro de duodecim aquis docetur.

(Glossa III)

In the first text (1), Albert equates metal generation with stone generation as a result of some form of *virtus mineralis*. He clearly refers to the text of the *De mineralibus*, in particular to the idea that the capacity for petrification derives from a certain mineral *virtus* that is produced *in hora terremotus*¹⁶. Remarkably, in the pseudo-Aristotelian text there is no mention of the formation of metals that Albert mentions, while the correlation between the two types of generation can be found in Alfred's gloss, suggesting that the latter could have been one of Albert's sources.

In the second passage (2), Albert refers to the features and action of a substance used by the alchemists to solidify bodies by drying them out, and to transform the nature of one type of matter into another. This second substance is the *lac virginis* mentioned in the *De mineralibus*. According to Albert, the way

¹⁶ RUBINO, *Il De mineralibus* cit., p. 36, 33.

lac virginis is produced can be learnt from the « books about twelve waters », *libros de XII aquis conscriptos*, and not, as the two editions of the text attest, *libros de septem aquis conscriptos*¹⁷. Remarkably, in the third gloss, Alfred, while examining the same topic of the *lac virginis*, quotes the same source and writes: *in libro de duodecim aquis*. Thus, although Albert might draw this reference from the same source that Alfred quotes, rather than from Alfred himself, the possibility that he depends exclusively on Alfred for his acquaintance with the *libri de XII aquis* has to be taken into serious consideration. Therefore, not only the first, but also the second passage of Albert's *Mineralia*, if interpreted in this way, demonstrates a direct dependency on the Alfredian text. We may rightly suppose, in conclusion, that Albert had access to the Alfredian glosses.

THE CONTENT OF THE COMMENTARY

The main subject of the commentary on the *De mineralibus* is the process of solidification, which is due to the effects of heat and cold, and based on the properties of a body. Alfred deals with the following topics: the melting of viscosity and its solidification due to the effects of heat and cold; solidification of substances in which water predominates — similar to what happens with salt; the formation of fossils; the inflamed vapour produced in the depths of the Earth during earthquakes and able to solidify, as well as the vapour formed during a solar eclipse; the thick and earthy (dry) nature of the *lac virginis*, a liquid that, according to Alfred's annotations in the *De mineralibus*, is composed of two waters and used by alchemists (*quidam ingeniosi*) in order to solidify dry matter.

Its language and style are consistent with the rest of the commentary on the *Liber meteororum*. The expression *unde et* (meaning 'and so'), for example, appearing here 5 times, recurs 28 times in the commentary on books I-IV of *Meteorologica*, and can be found also in the commentary on the *De plantis* and in the *De motu cordis* (10 times in the first case, and 1 time in the second one); two glosses, the first and the fourth in the Bodleian manuscript, reveal an evident correlation with the commentary on the second and third books of Aristotelian *Meteorology*.

The first gloss¹⁸ focuses on the origin of stones from viscous mud; it deals with an initial passage of the *De mineralibus*¹⁹, and begins with « A luto igitur

¹⁷ Both available editions are mistaken concerning this quotation (ALBERTUS MAGNUS, *Mineralia, Opera omnia*, ed. A. BORGNET, Paris 1890, vol. V, p. 13; ALBERTUS MAGNUS, *De mineralibus, Opera omnia*, ed. P. JAMMY, Lyon 1651, p. 217). At the end of Caput IX, Liber I, Tractatus I, we read *habent libros de septem aquis conscriptos*, but the manuscripts attest *habent libros de XII aquis conscriptos*.

¹⁸ *Infra* Glossa I, p. 359.

¹⁹ RUBINO, *Il De mineralibus* cit., p. 35, 7-10: « Lutum vero huic transmutationi aptius est viscosum [...] In ripis quoque Gion visa est terra [...] in lapidem converti in spatio XXIII annorum ».

viscoso ». Alfred explains that properties present in the viscous substance solidify gradually. In certain stones, however, liquidity and viscosity are combined in such a way that they cannot be separated even by roasting them (in this context the author uses an Aristotelian term, *obtesis*, from ὀπτησις, to indicate roasting; that is, the baking produced by dry external warmth²⁰). However, liquidity and viscosity can evaporate together (*viscositas cum liquiditate evaporat*) if subjected to fiercer fire (*vehementiori igne*). And nevertheless, as happens with gypsum and lime, a small part resists, i.e. does not evaporate, and pulverizes (*pulverizantur*).

The content of this gloss is announced by a previous gloss, about half-way through book IV of *Meteorologica*²¹. Here Alfred comments on the passage in which Aristotle examines bodies that do not solidify (*incoagulabilia*) either because they do not contain water or because, even if they are composed partly by water, they are predominantly formed by air, as are, for example, viscous substances (*quid viscosum, quemadmodum gluten*)²². Alfred also points out that these latter substances solidify easily, as will be clarified in the *De mineralibus* (*unde inferius dicitur "lutum viscosum in lapides verti"*)²³. Yet, viscosity does not dissolve separately from liquidity. Viscosity and liquidity indeed evaporate together with intense heat (*vehementi calore*). At the end of this process, however, a certain quantity of substance remains, which does not evaporate, but is rather pulverized (*pulverizatur*)²⁴. As we can observe, the passage quoted by Alfred in the commentary on book IV of *Meteorologica* corresponds with the one commented upon in the first gloss on the *De mineralibus*, and in these two excerpts the explanation of the way viscous substances solidify coincides.

The same concept will recur also in the last Alfredian gloss on the *De mineralibus*, which is unfortunately barely legible due to the poor condition of the manuscript²⁵.

In the second gloss on the *De mineralibus* the *incipit* of the text represents an outspoken cross-reference to the previous commentary on the *Meteorologica*, book first, chapter two: « Sicut enim in primo capitulo secundi libri dicitur, vapor grossus calidus acque admixtus facit eam salsam ». Alfred does not comment on the petrification of viscous substances, but rather of predominantly watery ones,

²⁰ ARISTOTELES, *Meteorologica*, Δ, III, 381a23.

²¹ OTTE, *Alfred of Sareshel's Commentary on the Metheora* cit., p. 70.

²² ARISTOTELES, *Meteorologica*, ed. RUBINO, p. 26, 429-431: « incoagulabilia uero quaecumque non habent humorem aquosum, neque aque sunt [...] quaecumque aqua participant [...] si quid uiscosum, quemadmodum gluten ».

²³ OTTE, *Alfred of Sareshel's Commentary on the Metheora* cit., p. 70.

²⁴ *Ibid.*

²⁵ *Infra* Glossa IX, pp. 11-12.

which solidify due to the preponderance of the earthy element. As in the case of salt, the cause of solidification is the thick, warm and earthy (i.e. dry) element, mixed with water vapour (*vapor grossus calidus aque admixtus [...] terreus*). This process consists in the removal of the moist, which on one side dissolves due to the inner or external warmth of the body, and on the other coagulates with the earthy element. In the same way, stones are formed through the solidification of watery substances, but with an important difference: salt is porous and, since it comes from warm, dry vapour, it can be liquefied by heat; solid stones, instead, are produced by cold vapour, mixed with water, and therefore they cannot liquefy with heat.

In fact, Alfred already dealt with «*vaporem grossum terreum calidum siccum*»²⁶ at the beginning of his commentary on book II of *Meteorologica*, where he studies, in particular, the formation, nature and salinity of the sea²⁷. He explains this process in three ways: a) as a result of the continuous movement of the sun above the sea; b) as a result of warm, dry vapour (*vapor calidus siccus*); and c) as a result of the prolonged positioning of the sun in the same place. Regarding the second point, Alfred observes: just as the salina transform (*vertunt*) vapour into salt (*vaporem grossum terreum calidum [...] in salem*) through fire, sun or the warmth of any other agent able to eliminate the liquid component of a body (*aliter quolibet modo liquiditate eiecta*), so the sea transforms a river into salty water through its own salinity, whenever it flows into the sea. The same phenomenon takes place in springs and wells that are near the sea, whose water becomes salty²⁸.

As can be seen, these cross-references have a systematic correspondence to the commentary on the *Meteorologica*. In sum, in the glosses on the *De mineralibus* Alfred cites parts of the previous commentary on the four books of Aristotle's *Meteorologica*, at times indicating both book and chapter, and always implying the title and author of the work. Alfred evidently considers the commentary on the *De mineralibus* to be the last part of a more extensive work: the commentary on the *Liber Meteororum*.

²⁶ OTTE, *Alfred of Sareshel's Commentary on the Metheora* cit., p. 46.

²⁷ ARISTOTELES, *Meteorologica*, B, I, 353a32-35.

²⁸ OTTE, *Alfred of Sareshel's Commentary on the Metheora* cit., pp. 45-46.

GLOSSAE SUPER *DE MINERALIBUS*

The transcription of the glosses has been conducted according to the manuscript Oxford, Bodleian Selden supra 24, ff. 113r-114r. Also reported are the fragments preserved in the manuscripts Leipzig, University Library, 1392, ff. 187r-189v (= L), and Vatican, Urb. lat. 206, ff. 253v-256v (= U), as well as some passages taken from Adam of Bockenfield's commentary on *Liber meteororum*, Roma, S. Isidoro I/10, ff. 159ra-161rb (= A), which can help verify and improve the Bodleian text.

f. 113r

Glossa I. *viscosum* [a note on conglutination as a result of from viscosity, which is one of the two ways to generate a mineral from mud]

A luto igitur viscoso primum liquiditate per caliditatem eiecta sola remanet viscositas cum arido conglutinata, que, quia mixta sunt dominante arido, duritiam concipiunt fitque lapis. Conglutinantur enim arida cum visco naturaliter estque natura ad finem fortissima. Unde et hee proprietates in ipso paulatim procedunt ad ultimum, excepto quod in quibusdam lapidibus liquiditas ita viscositati permixta est, quod obtesi ab ea separari non possit. Unde et vehementiori igne viscositas cum liquiditate evaporat, nisi quantum ad debilem sufficit coherentiam, ut in calce et gipso et similibus, ideoque pulverizantur. In aliis vero tota exspirat, unde et ultima caliditate ignito arido liquatur viscositas.

Glossa II. *sal* [the causes of minerals are either viscous substances or liquids; such liquids are either frozen by means of a mineral *virtus* or coagulated as an effect of the predominance of earth, as in the case of salt]

Sicut enim in primo capitulo secundi libri dicitur, vapor grossus calidus aque admixtus facit eam salsam, unde et alia eius pars in quolibet loco relictā vel sole siccatur vel frigore. Solius enim humidi privatio facit. Predictus enim vapor valde grossus et terreus et calidus est. Pars ergo humiditatis calore cogente exspirat, pars cum terrestri substantia vaporis coagulatur. Et hoc coagulatum est sal. Calor vero vel extrinsecus est, ut sol ignis, vel intrinsecus, ab ipso scilicet vapore qui frigiditate compressus partem humiditatis educte pars, ut dictum est, coagulata, fitque a frigiditate, cum parva fuerit aqueitas. Sal vero, pro qualitate tam vaporis quam aque, diversis qualitatibus in fieri. A vapore ergo calidus, a terra siccus. Hec

5 mixta sunt [*sub. : lapides*] 6 fitque *ex corr.* 7 in ipso [*scil. visco*] 10 sufficit] sufficere?
4-12 A luto ... viscositas L f. 187r (without mention of the author): quia lutum unctuosum liquiditate per calorem solis eiecta cum arido conglutinatur et tandem in terram lapidis convertitur; A f. 160ra: dicitur av' quod a luto unctuosum liquiditate educta se calorem solis per duriciem et fit lapis etc. 18 privatio [coagulare?] 23 tam s. l. 24 in fieri [inficitur?]

2 viscosum: RUBINO, *Il De mineralibus*, p. 35, 8. 13 sal: RUBINO, *Il De mineralibus*, p. 36, 20. 16 Sicut ... libri: OTTE, *Alfred of Sareshel's Commentary on the Metheora*, pp. 45-46. 17 eam: RUBINO, *Il De mineralibus*, p. 36, 18-19: « substantia in qua vincit aqua ».

- 25 aque mixta ipsam in terram convertunt, fiunt quoque ex aqua lapides ad salis quodammodo similitudinem, excepto quod vapor aque mixtus frigidus dominio siccitatis aquam coagulat, et ideo calor illas fere non solvit, quia frigore tantum coagulate non sunt. Ceterum ex aqua nitent, tinguntur ex vaporibus, ab utrisque varias proprietates accipiunt, suntque lenes et vehementer compacte ex vapore
30 frigido sicco. Sal vero asperum porosum ex vapore calido sicco.

f. 113v

Glossa III. *lac virginis estque eius* [reference to a work entitled *Liber de XII aquis*]

qualiter autem et ex quibus lac virginis et cetera coagulantia componantur, in libro de duodecim aquis docetur.

- 35 Glossa IV. *quedam animalia vertuntur in lapides* [petrification of fish, coral, ebony]

Ut piscis quidam, qui cum extrahitur a mari, statim fit lapis, caloris, nisi quantum ad exilem animatione<m> sufficit expers, qui calido equoris vapore conservatur, quo per tactum aeris amisso simul cum inanimatione lapidescit. Eodem modo coctum ovi alibumen calore solidatur in vitello eiecta liquiditate per decoctionem.

- 40 Similiter quoque corallus fit lapis, ebenus quoque fere lapidescit, unde et ustionem non facilem recipit. Parum enim in hiis est aer, nullus ignis, aqua et terra valde compacta.

30 Glossa II.bis « de spatio transmutationis illius » L f. 187r: Al. utrum per triginta tres annos hoc sit non refert, cum per plus duriores per minus molliores fiant; A f. 160ra: dicit Av. quod non refert utrum hoc fiat per xxx3 annos, aut non, cum per plus duriores fiant per minus autem molliores. 33-34 qualiter ... docetur U f. 253v and L f. 187r: Alf. lac virginis est valde densum et valde terrestris nature, qualiter autem (>U) et ex quibus fiat et cetera coagulata fiant (fiunt U), in libris de XII aquis dicitur (U: dicitur i. l. d. XII a.); A f. 160ra: utuntur quidam lacte virginis de qua dicit Av. quod lac virginis est densum et multum terrestris nature: qualiter autem et ex quibus fiant et etiam cetera coagulata fiant, in libro de XII aquis dicitur, ut iste dicit. Cf. *De duodecim aquis (Liber duodecim aquarum)*. Inc.: « Libelli huius aquarum series duodecim splendet capitulis ». Cf. L. THORNDIKE, P. KIBRE, *A catalogue of incipits of medieval scientific writings in Latin by Lynn Thorndike and Pearl Kibre*, The Medieval Academy of America, London 1963, col. 817; L. THORNDIKE, *A History of Magic and Experimental Science*, 8 vols., Columbia University Press, New York 1923-1958, vol. III, p. 650; *Catalogo di manoscritti filosofici nelle biblioteche italiane*, vol. II, Firenze 1980-2003 (Corpus philosophorum Medii Aevi. Subsidia 1-9, 11-12, 14), p. 189. Mss.: Cambridge, University Library, Add. 4087, ff. 130v-132r; Paris, Bibliothèque Nationale de France, lat. 6514; Paris, Bibliothèque Nationale de France, lat. 7156; Savignano sul Rubicone (Forlì-Cesena), Biblioteca della Rubiconia Accademia dei Filopatrìdi, 44, ff. 137r-139r. 36 caloris nisi L.: et est viscosissime (U viscose) substantie caloris expers nisi tanti (quanti L) 37 animatione<m>: anima et rationem L expers qui: a LU equoris vapore: v. e. L inanimatione: animatione U

32 lac ... eius: RUBINO, *Il De mineralibus*, p. 36, 26. 35 quedam ... lapides: RUBINO, *Il De mineralibus*, p. 36, 31.

Glossa V. *discontinuantur subito virtute quadam que exit a terra in hora terremotus* [the vapour deriving from an earthquake as principle of mineral formation]

Hoc fit ad similitudinem generationis metallorum, que vaporaliter usque 45
ad speram igneam ascendunt. Vapor enim in inferioribus terre agitur,
vehementer ignitur, et exiens ea que cohagulationi apta sunt coagulat ut in
proximo determinabile. Quod si hic singula corpora coagulat, vis mineralis est,
que suo subiecto ab alio vel aliquibus componentium dicitur, vel ex proportionem
commixtionis, que ut innumerabiles sunt, sic omnes ratione et oratione persequi 50
nihil agentis et frustra laborantis est.

Glossa VI. *Estque locus in Arabia* [predominance of active leading principle]

Ex solis adlatione vel ad vaporem aliquem qualicumque dispositione, ut apparet
in eclipsi solis. Tunc enim omnia corpora quodammodo aerea tinguntur, similiter
quoque stelle in ortu, aut corpora lucida in fundo aque. 55

Glossa VII. *Panis quoque prope Caracem* [description of the petrification of bread]

exspiravit enim liquiditas et dissoluta est viscositas consequenter coagulata ex
frigore.

Glossa VIII. *Sepe etiam fiunt lapides ex igne cum extinguitur* [petrification after
burning] 60

Fit lapis «ex igne, cum extinguitur», id est amoto igne a materia viscosa.
coagulatur, quod ipsum [tempore ?] vero sic. Hic ignem accipit sicut est compositi,
nisi dicas tres esse speciem ignis, carbonem scilicet, lucem et flammam.

Glossa IX. *Cecidit quoque*

In horum compactione corporum duplici processu naturam equiparat violentia. 65
Vel enim metalli ipsius materiam ad elevatissimam aeris superficiem ultima
caloris extollet [...] vaporalem.

Vel vaporem [non ?] ad metalli naturam preparatum et [...bet] hec pari caliditatis
intemperantia obtesi constrictum, quod natura sibi derelicta per multam temporis
quantitatem efficeret [quod affet...] vapor in eam, et quod dissolvit calor igneus 70
viscositas patiens.

45 metallorum *corr.* ex metallarum 57 viscositas *corr.* ex discositas 71 viscositas *ex corr.*

43 discontinuantur ... terremotus : RUBINO, *Il De mineralibus*, p. 36, 32-33. 50-51 que ... est :
PLATO, *Tim.* 40 d, Waszink p. 34, 9-10. 52 Estque ... Arabia : RUBINO, *Il De mineralibus*, p. 37, 40.
56 Panis ... Caracem : RUBINO, *Il De mineralibus*, p. 37, 41. 59 Sepe ... extinguitur : RUBINO, *Il De*
mineralibus, p. 37, 43-44. 64 Cecidit quoque : RUBINO, *Il De mineralibus*, p. 37, 49.

[Vel] descendit confluxus partium efficien[...] ipse dicit compactum fuisse [...] et particularis «ad quantitatem granorum milii magnis» que in vapore materialiter elevabantur, digerebantur a calore, dissolvebantur [...] ex similitudine
 75 de<s>cendebat, ex compactione. Sic ferrum, sic es et cetera metalla. Quod autem rotundum de<s>cendit ferrum dissoluto et [...ma via] fecere.

Quod autem es similitudine sive «sagittis hamatis» in eam est compactu[m] et adustio, unde et de<s>cendendo [...] non liquatur. Viscositas enim cum liquiditate inmoderato caloris excessu exspirat, quod et ipse asserit dicens [lique]fieri non
 80 posse, sed pulverizari .

Quod autem fere «infabricabile erat» ferrum, ultima efficit durities a validissima [...]concepta.

Quod tamen «enses optimi», optime digesta fecit materia corpora, qualitas lapidea eadem dicta «cum corruscationibus» quandoque descendunt [...].

75 compactione] s. l. add. coagulabantur ex frigore 81 fere s. l.

ABSTRACT

The Commentary of Alfred of Shareshill on the Pseudo-Aristotelian De mineralibus

Alfred of Shareshill was a leading figure in the English intellectual culture of the 12th century. He is the author of two translations, one treatise and three commentaries. One of these works is a commentary on the Avicennian *De mineralibus* and represents the last part of the more extensive commentary on Aristotle's *Meteorologica*, as evidenced in the manuscript Oxford, Bodleian Library, Selden supra 24 (ff. 113r-114v). The glosses that constitute this commentary were identified by James K. Otte in 1993, but they still remain unedited.

For the first time, this contribution offers an edition of the Alfredian glosses on *De mineralibus*, which represent, together with the commented text (*De mineralibus*), an important step in the scientific study of mineralogy in the Middle Ages. The main subject of the commentary is, in fact, the generation of minerals through the process of solidification, which in turn is due to the effects of heat and cold. The analysis is carried out in a highly technical and complex language.

With the edition of the glosses on the *De mineralibus*, Alfred of Shareshill's entire legacy is now available to the public.

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TOMMASO ALPINA

Al-Ġūzġānī's Insertion of *On Cardiac Remedies* in Avicenna's *Book of the Soul*: the Latin Translation as a Clue to his Editorial Activity on the *Book of the Cure*?*

INTRODUCTION

The aim of this contribution is to outline some preliminary remarks on the textual and editorial vicissitudes of chapters 2-9 of Avicenna's medical treatise *Maqāla fī l-adwiya al-qalbiyya*, also attested under the title *Aḥkām al-adwiya al-*

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All quotations from and the translations of Avicenna's *Maqāla fī l-adwiya al-qalbiyya* are based on *Edviyei Kalbiye* (Arabic text), R. B. KİLİSLİ ed., in *Büyük Türk Filozof ve Tıp Üstadı İbn Sina, Şahsiyeti ve Eserleri Hakkında Tetkikler*, İstanbul 1937, pp. 1-56, because Simone Van Riet refers to this edition in the Arabic-Latin apparatus of her edition of the Latin translation of an excerpt from this treatise.

All quotations from and the translations of Avicenna's *Kitāb al-Nafs* are based on *Avicenna's De Anima [Arabic Text]*, being the *Psychological Part of Kitāb al-Shifā*, ed. F. RAHMAN, Oxford University Press, London - New York - Toronto 1959, 1970². The quotation from Avicenna's *Nafs* is usually followed by the reference to the page and the line number of the corresponding passage in the Latin translation in square brackets. See AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V, édition critique de la traduction latine médiévale par S. VAN RIET, introduction sur la doctrine psychologique d'Avicenne par G. VERBEKE, E. Peters - E. J. Brill, Louvain - Leiden 1968; AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* I-II-III, édition critique de la traduction latine médiévale par S. VAN RIET, introduction sur la doctrine psychologique d'Avicenne par G. VERBEKE, E. Peters - E. J. Brill, Louvain - Leiden 1972.

All quotation from and the translations of Avicenna's *Kitāb al-Qānūn fī l-ṭibb* [henceforth *Qānūn*] are based on IBN SINĀ, *Qānūn fī l-ṭibb*, 5 vols., Ma'had tā'riḥ al-ṭibb wa-l-abḥāṭ al-ṭibbiyya, Dilhī al-Ġadīda, al-Hind 1402-17 [i.e. Institute of History of Medicine and Medical Research, Ġāmi'a Hamdard, New Dehli, India 1981-96]. The quotation from Avicenna's *Qānūn* is usually followed by the reference to the page and the line number of the corresponding passage in the Latin translation in square brackets. See AVICENNA, *Liber canonis*, Reprographischer Nachdruck der Ausgabe Venedig 1507, G. Olms, Hildesheim 1964. I choose to quote from this edition of the *Qānūn* because, though not being a proper critical edition, it seems to record a larger amount of variant readings in the critical apparatus than those recorded in previous printings.

*qalbiyya*¹ (*De Medicinis cordialibus*, or *De Viribus cordis* in Latin, *On Cardiac Remedies* in English, henceforth *Adwiya Qalbiyya*), that Abū ‘Ubayd ‘Abd al-Wāḥid ibn Muḥammad al-Ġūzġānī (fl. XI c.), Avicenna’s disciple and secretary, inserted between the end of the fourth treatise and the beginning of the fifth treatise of Avicenna’s *Kitāb al-Nafs* (*Liber de anima seu Sextus de naturalibus* in Latin, henceforth *Nafs*), which in turn forms part of the philosophical masterpiece written by Avicenna, the extensive and influential *summa* entitled *Kitāb al-Šifā’* (*Book of the Cure*).

In the introduction of the first volume of her edition of the Latin translation of Avicenna’s *Nafs* (1968), Simone Van Riet provides some pieces of information about this insertion and, at the same time, argues in favour of her decision of editing its Latin translation as an appendix to the edition of the Latin translation of Avicenna’s *Nafs*, unlike the editors of the Arabic text, who decided not to print this *foreign body*: «En tout cas, plusieurs manuscrits arabes insèrent ces chapitres là où les situe la tradition manuscrite latine. Celle-ci doit donc avoir eu comme modèle un ou des manuscrits arabes comportant l’insertion. Le texte arabe n’en a pourtant pas été repris par les éditions critiques du *De anima* de F. Rahman et J. Bakoš. Il nous a semblé au contraire que les chapitres du *De Medicinis cordialibus* devaient être édités en même temps que le *De anima* et d’après les mêmes manuscrits, puisque les mêmes copistes transcrivent le *De anima*, Livre IV, chapitre 4, puis l’extrait du *De Medicinis cordialibus*, et à la suite de celui-ci, le début du Livre V du *De anima*. Entre l’extirpation pure et simple du « corps étranger » pratiquée par les deux éditions critiques du texte arabe, et l’insertion des chapitres du traité de médecine venant couper le texte du *De anima*, comme le font les manuscrits latins, nous avons choisi de l’éditer en annexe (voir *Appendix*, p. 187) »².

These preliminary and cursory considerations, together with the further information provided by Marie-Thérèse d’Alverny, Jules Janssens, and Simone Van Riet herself in other studies³, are a solid but meagre basis to reconstruct the

¹ See G. C. ANAWATI, *Essai de bibliographie avicennienne*, Dār Al-Ma’ārif, Cairo 1950, p. 170.

² Cf. AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V cit., p. 99*.

³ M. T. D’ALVERNY, *Notes sur les traductions médiévales d’Avicenne*, « Archives d’histoire doctrinale et littéraire du Moyen Âge », 1952, 19, pp. 58-337; J. JANSSENS, *Ibn Sīnā (Avicenna), Latin Translations of*, in H. LAGERLUND ed., *Encyclopedia of Medieval Philosophy. Philosophy Between 500 and 1500*, Springer, Dordrecht 2011, pp. 522-527; S. VAN RIET, *Trois traductions latines d’un texte d’Avicenne*: « al-Adwiya al-qalbiyya », in A. M. DIAS FARINHA ed., *Actas do IV Congresso de Estudos árabes e islâmicos. Coimbra-Lisboa 1 a 8 Setembro de 1968*, E. J. Brill, Leiden 1971, pp. 339-344; EAD., *Avicenna xii. The impact of Avicenna’s philosophical works on the West*, in E. YARSHATER ed., *Encyclopaedia Iranica*, vol. III, Routledge and Kegan Paul, London - Boston 1989, pp. 104-106.

history of this text and to evaluate its importance, both in itself⁴ and in relation to the textual tradition of Avicenna's *Nafs* for, since then, no considerable progresses have been made in this field. Simone Van Riet's decision to publish the excerpt from the *Adwiya Qalbiyya* as an appendix may be regarded as disputable: given that the excerpt is part of the Latin translation of Avicenna's *Nafs*, and is apparently translated by the same translators, i.e. Avendauth and Dominicus Gundissalinus⁵, the editorial criteria for the edition of the entire bulk of the text should have been the same⁶. However, the Belgian scholar has had the undisputed merit of pointing out (both explicitly and implicitly) the directions along which it is worth pursuing research, that are: firstly, detecting the reason why al-ĞŪzğānī inserted a selection from Avicenna's *Adwiya Qalbiyya* in this precise place of Avicenna's *Nafs*, and the related question of why al-ĞŪzğānī inserted in

⁴ On the content of the *Adwiya Qalbiyya* in itself, its relation to Avicenna's *Qānūn*, and its contribution to cardiotherapy, see M. ULLMANN, *Die Medizin im Islam*, E. J. Brill, Leiden 1970, pp. 155-156; R. U. AHMAD, *Critical Appreciation of Avicenna's Theories and Terminology of Drugs for General and Cardiac Ailments* in K. al-Adwiyah al-qalbiyya, « Bulletin of Indian Institute for the History of Medicine », 7, 1977, pp. 138-143; Id., *Single Drugs mentioned by Avicenna for Cardiac Ailments in his Canon and Kitāb al-Adwiyah al-qalbiyyah*, « Bulletin of Indian Institute for the History of Medicine », 9, 1979, pp. 46-66; K. S. DURRANY, T. V. SIDDIQI, *Al-Adwiya al-qalbiyya. Ibn Sīnā: Treatise on Cardiac Drugs, an Introduction*, « Studies on History of Medicine », 1/4, 1980, pp. 32-35; D. GRACIA, S. VIDAL, « Avicenna sobre el corazón », in *Actas XXVII Congreso Internacional de Historia de la Medicina* 31 agosto-6 septiembre 1980, Academia de Ciencias Médicas de Catalunya i Balears, Barcelona 1981, vol. II, pp. 711-722; M. S. KHAN, *Ibn Sina's Treatise on Drugs for the Treatment of Cardiac Diseases*, « The Islamic Quarterly », 27/1, 1983, pp. 49-56; F. SANAGUSTIN, *Avicenne, XI^e siècle, théoricien de la médecine et philosophe. Approche épistémologique*, Institut Français du Proche-Orient, Damas 2009, p. 32. To these entries it has to be added: Y. TZVI LANGERMANN, *Restoring emotional health by repairing the pneuma in the heart: Ibn Sīnā's al-Adwiya al-Qalbiyya*, paper delivered at the conference *The Body's Mind and the Mind's Body: Bodily States and Cognition in the Greek, Arabic and Hebrew Philosophical and Medical Traditions* (orgs.: K. Ierodiakonou, N. Germann, G. Freudenthal) held in Geneva on April 11-13, 2016.

⁵ That the translators considered the excerpt as integral part of Avicenna's *Nafs* clearly emerges from the prologue of the Latin translation where the fourth treatise is said to contain five chapters: « Pars quarta continet capitula quinque. [...] In quinto continetur id quod adiecit Auohaueth » (p. 5, 49-56). On the authorship, which however is not entirely certain, of the Latin translation of the insertion, see AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V cit., p. 99*; VAN RIET, *Trois traductions cit.*, p. 343; and D. N. HASSE, A. BÜTTNER, *Notes on Anonymous Twelfth-Century Translations of Philosophical Texts from Arabic into Latin on the Iberian Peninsula*, in A. BERTOLACCI, D. N. HASSE eds., *The Arabic, Hebrew, and Latin Reception of Avicenna's Physics and Cosmology*, De Gruyter (Scientia Graeco-Arabica), forthcoming.

⁶ Given that all the Latin manuscripts of the Latin translation of Avicenna's *Nafs* contain the insertion, one would have expected to find the text of the insertion in the exact place where the manuscripts have it, and an Arabic-Latin lexicon, and a Latin-Arabic lexicon of the entire translation. However, the editor publishes the insertion as an appendix, and provides an exhaustive Arabic-Latin and Latin-Arabic lexicon only for the Latin translation of Avicenna's *Nafs*. As for the insertion, she provides only a separate lexicon of notable terms (pp. 328-330), which are basically those not occurring in the Latin translation of the *Nafs*. This choice makes a lexicographic comparison between the translations of the two texts almost impossible.

this place only an excerpt of this treatise and not all of it; secondly, looking at the Arabic textual tradition of this insertion, which is by no means reflected in the current editions of the Arabic text of Avicenna's *Nafs*; and, lastly, evaluating the relevance of this insertion and, consequently, the importance of studying it in relation to the textual tradition of both the *Adwiya Qalbiyya* and the *Nafs*.

This article will address all these issues by preliminarily providing an outline of the author and of the source of this insertion.

1. AUTHOR AND SOURCE OF THE INSERTION

1.1 *The Author*

The name of the author who is the responsible for the insertion, and the name of the work from which it is drawn can be derived from the *incipit* and the *explicit* of the Arabic text as well as of the Latin translation of the insertion⁷.

Text 1.

Incipit. Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad al-Ġūzġānī said: «These [sc. chapters 2-9] are chapters extraneous to this book [sc. to Avicenna's *Kitāb al-Nafs*], which I have transferred here from the medical books containing that at which the *ṣayḥ al-ra'īs* [sc. Avicenna] hinted [in this part of his *Kitāb al-Nafs*]. Most of them [are drawn] from his treatise *On Cardiac Remedies* [that he wrote] for a friend of his who was a beginner».

Explicit. This is the end of the chapters of that book [sc. of *On Cardiac Remedies*] that Abū 'Ubayd has transferred to this place of the *Book of the Soul*⁸.

The authorship of this insertion can be therefore indisputably attributed to the already mentioned Abū 'Ubayd al-Ġūzġānī. However, very little is known

⁷ The Arabic text of the *incipit* and the *explicit* have been drawn from the manuscripts preserving the insertion, since there is no printed version of the Arabic text of the insertion. For the manuscripts preserving the insertion, see Appendix II to the present article.

⁸ *Incipit* of the Arabic text: «qāla Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad al-Ġūzġānī ḥādīhi fuṣūl ḥāriġa 'an ḥādā al-kitāb naqaltuhā ilayhī min al-kutub al-ṭibbiyya allatī taṣṭamilu 'alā mā aṣāra al-ṣayḥ al-ra'īs 'alayhī wa-aktaruhā min maqāla lahū fī l-adwiya al-qalbiyya ilā ba'ḍ al-mubtadi'īna min aṣḍiqā'ihī» (*Fragmentum*, p. 187, 4-8: «Dixit Auohaueth Iurgianus: "Hae sunt distinctiones extra hunc librum, quas ego transtuli in eum a libris physicis in quibus est quod praecipit auctor praecipuus; et plures ex eis sunt ex epistola quam fecit de speciebus cordium ad unum amicorum suorum introducendum, dicens" [...]» [the confusion between *medicis* and *physicis* is due to the similar *rasm* of the two Arabic words: *ṭibbiyya* and *ṭabī'iyya*; while *risāla* (= *epistola*) is attested in Arabic as a variant for *maqāla* in the title of the work]). *Explicit* of the Arabic text: «fa-ḥādā āḥir mā naqalahū Abū 'Ubayd min fuṣūl dālika al-kitāb ilā ḥādā al-mawḍi' min kitāb al-nafs» (*Fragmentum*, p. 210, 74-75: «Et hic finis est eius quod transtulit Auohaueth ex capitulis illius libri ad hunc locum huius libri *De anima*»).

about his life. He probably was already a jurist (*faqīh*) in Ğurġān when he met Avicenna in 1012. He became one of his disciples and, above all, his secretary (as is common knowledge, he completed Avicenna's autobiography after his death). He studied logic and Ptolemy's *Almagest* with him. He also wrote a treatise entitled *Kitāb Kayfiyyat tarkīb al-aflāk* (*Book of the Manner of Arrangement of the Celestial Spheres*) on the problem of the so-called Ptolemaic equant, which apparently has not been preserved apart from a *mulaḥḥaṣ* (*compendium*) written by al-Ğüzğānī himself⁹. He aided Avicenna with the compilation of the *Kitāb al-Šifā'*, and he added the mathematical sections on geometry, arithmetic, astronomy, and music from Avicenna's earlier works to the *Kitāb al-Nağāt* (*Book of the Salvation*) as well as to the *Dānešnāme-ye 'Alā'ī* (*Philosophy for 'Alā' al-Dawla*). Al-Ğüzğānī also commented on the difficult passages of Avicenna's *Kitāb al-Qānūn fī l-ṭibb* (*Canon of Medicine*), and translated the *Kitāb al-Ḥayawān* (*Book of Animals*), namely the zoology of the *Šifā'*, from Arabic into Persian¹⁰.

1.2 The Source

In his *Biography of Avicenna*, al-Ğüzğānī reports that Avicenna composed the *Adwiya Qalbiyya* after his arrival in Hamadān about 405H/1014-15¹¹. In the introduction, Avicenna states that he wrote it for an 'Alid dignitary (*al-šarīf*), one al-Sa'īd Abū l-Ḥusayn 'Alī bin al-Ḥusayn al-Ḥasanī, who, as Mahdavi suggests, may be the same person at whose home he stayed after his release from the fortress of Fardaġān¹². Then, Avicenna briefly outlines the content of the work,

⁹ It is noteworthy that with respect to the topic of this work al-Ğüzğānī seems to show an anti-Avicennian attitude. For this work and its edition, see G. SALIBA, *Ibn Sīnā and Abū 'Ubayd al-Jūzjānī: The Problem of the Ptolemaic Equant*, in G. SALIBA ed., *A History of Arabic Astronomy. Planetary theories during the Golden Age of Islam*, New York University Press, New York - London 1994, pp. 85-112, and also A. DHANANI, *Jūzjānī: Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad al-Jūzjānī*, in T. HOCKEY ET ALII eds., *The Biographical Encyclopedia of Astronomers*, Springer, New York 2007, pp. 604-605.

¹⁰ For these pieces of information, see DHANANI, *Jūzjānī* cit. Some scattered information related to al-Ğüzğānī's role as Avicenna's secretary can be found in D. GUTAS, *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*, Brill, Leiden 1988 (second, revised and enlarged edition 2014), p. 29. However, on the role that al-Ğüzğānī played in the compilation of Avicenna's *summae* and, in particular, of his *Šifā'*, there is no specific bibliography. What is more, although contemporary scholarship is showing an increasing interest in the intersection between psychology and medicine in Arabic philosophy (see, for example, P. E. PORMANN, *Epidemics in Context: Greek Commentaries on Hippocrates in the Arabic Tradition*, De Gruyter, Berlin 2012 (*Scientia Graeco-Arabica*); and *Islamic Medical and Scientific Tradition: Critical Concepts in Islamic Studies* edited by P. E. PORMANN, Routledge, London 2011), the figure of al-Ğüzğānī and his activity of integration of psychology and medicine have remained shadowy.

¹¹ *The Life of Ibn Sina. A Critical Edition and Annotated Translation*, ed. W. E. GOHLMAN, State University of New York Press, Albany - New York 1974, p. 60, 6-8, and p. 61, n. 82.

¹² Y. MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā*, Intiṣārāt-i Dānišgāh-yi Tihrān, Tehran 1333/1954, p. 24.

i.e. the rules of cardiac drugs (*maqāla taštamilu 'alā aḥkām al-adwiya al-qalbiyya*, tr. *a treatise that includes [the treatment of] the rules of cardiac drugs*, p. 1, 4), and its main stylistic feature, i.e. brevity (*ataḥarrà fihā al-iḥtiṣār*, tr. *I pursue brevity in it*, p. 1, 5).

According to Maḥdavi's description, which is reflected in the first edition of the Arabic text¹³, this treatise consists of nineteen chapters bearing no specific titles. The internal subdivision of chapters reflects the content of the work, which can be ideally divided into two homogeneous parts. The first part (chaps. 1-9) contains a medico-psychological discussion about the pneuma, which is considered the vehicle (*maṭiyya*, *markab*)¹⁴ of the psychic faculties in the body, and the heart, which is not considered merely as a physiological organ, but also as the seat of emotions (happiness, sadness, fear, anger, etc.), and the regulator of the animal heat; and the second part (chaps. 10-19) divides drugs into several categories (e.g. stimulants, laxatives, diuretics, cooling, imparting warmth and vomit inducing), and prescribes simple (sixty-three) and compound (seventeen) drugs for the treatment of heart diseases¹⁵.

As to the Arabic manuscripts containing this work, Brockelmann records 33 manuscripts¹⁶, Maḥdavi 28 manuscripts¹⁷, and Gutas 33 manuscripts¹⁸. The list provided by D. Gutas encompasses all the manuscripts listed by Maḥdavi with the addition of five more manuscripts. It is noteworthy that the aforementioned lists encompass only witnesses of the direct tradition of the Avicennian treatise,

¹³ For the editions of the Arabic text as well as for its translations, see pp. 371-372 below.

¹⁴ These two terms are used also in the *Nafs* to refer to the pneuma. See *Nafs*, III, 7, p. 144, 2 [*markab*, *vehiculum*, p. 257, 50], and V, 8, p. 263, 9 [*maṭiyya*, *vehiculum*, p. 175, 50].

¹⁵ Although the discussion in the second part of the treatise is more detailed and comprehensive, the list of drugs provided here can be compared with that provided in *Qānūn*, III, xi, I, 7, p. 309, 4-13 for the treatment of cardiac diseases. In a recent article Ayman Shihadeh has shown that Ibn Ḡaylān al-Balḥī (ca. 505H/1111-2-590H/1194) criticized the lists of the nature of simple drugs that Avicenna provides in both the *Qānūn* and the *Adwiya Qalbiyya* because they contain « much inconsistency », and represent « an uncritical compilation from multiple earlier sources ». See A. SHIHADÉH, *A Post-Ghazālī Critic of Avicenna: Ibn Ḡaylān al-Balkhī on the Materia Medica of the Canon of Medicine*, « *Journal of Islamic Studies* », 24/2, 2013, pp. 135-174.

¹⁶ C. BROCKELMANN, *Geschichte der Arabischen Litteratur* [sic], vols. I-II, Brill, Leiden 1898-1902; 1943-1949² (vol. I, p. 599); suppl. vols. I-III, Brill, Leiden 1937-1949 (suppl. vol. I, p. 827). In his supplement, Brockelmann refers to a publication by A. Taymūr, appeared in « *Revue de l'académie arabe de Damas* », vol. V (1925?), p. 360 (n.c.), where other manuscripts containing the *Adwiya Qalbiyya* are possibly listed.

¹⁷ MAḤDAVĪ, *Fihrist*, p. 24.

¹⁸ GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., p. 515. Although the number of manuscripts is accidentally the same of that of the list provided by Brockelmann, the two lists contain different items. For the list provided by Gutas is based on « Maḥdavi, with addition from Reisman's *Avicenniana*, Daiber's *Collection IV*, and my random findings » (see GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., p. 414).

i.e. of the transmission of this treatise in separation from Avicenna's *Nafs*, with the exception of ms. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822, which attests chapters 2-9 of this treatise inserted within Avicenna's *Nafs*. An inventory of all these manuscripts is provided as Appendix I at the end of the present article.

As for the edition of the Arabic text of the *Adwiya Qalbiyya*, there are four provisional editions:

1. The partial edition of the first part of the treatise with the exclusion of the discussion on drugs, based on the ms. San Lorenzo de El Escorial (Madrid), Real Biblioteca del Monasterio de San Lorenzo de El Escorial, 844/5, which has been published in the monthly *al-'Irfān* of Sa'ida (Syria) in 1345H/1926¹⁹;
2. The first entire edition of the text published by Rifat Bilge Kilisli at Istanbul in 1937 together with a Turkish translation, and apparently based on 18 manuscripts²⁰;
3. The transcription of the ms. St. Petersburg, State University Library, 171 Rosen, published at Tashkent in 1966 by the Uzbek Academy of Sciences together with a Uzbek translation²¹;
4. The edition published by M. Zuhayr al-Bābā in *Min Mu'allafāt Ibn Sīnā al-tibbiyya*, in 1984, and based on 3 manuscripts²².

There are three Latin translations of the *Adwiya Qalbiyya*:

1. The already mentioned partial translation of chapters 2-9 inserted between the fourth and the fifth treatise of the Latin translation of Avicenna's *Nafs*, which was made by Avendauth and Dominicus Gundissalinus at Toledo in 1152-66²³;
2. The first entire translation made in 1306 by Arnau de Vilanova (Arnold of Villanova, 1240-1310/13)²⁴;

¹⁹ See BROCKELMANN, *Geschichte* cit., p. 599.

²⁰ *Edviyei Kalbiye* (Arabic text), ed. KILISLI cit., pp. 1-56. For the list of the manuscripts on which this edition is based, see Appendix I to the present article.

²¹ On this information, see KHAN, *Ibn Sina's Treatise* cit., p. 50.

²² *Min Mu'allafāt Ibn Sīnā al-tibbiyya*, M. Z. AL-BĀBĀ ed., Ma'had al-turāt al-'ilmī al-'arabī, Aleppo 1404/1984, pp. 221-294. For the list of the manuscripts on which this edition is based, see Appendix I to the present article.

²³ See AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V cit., pp. 187-210.

²⁴ *Arnaldi Villanouani philosophi et medici summi Opera omnia, cum Nicolai Taurelli medici et philosophi in quosdam libros annotationibus: indice item copiosissimo, ex officina Pernea per Conradum Waldkirch, Basileae 1585*. A critical edition of Arnau's translation is currently being prepared by Michael McVaugh with the assistance of Gerrit Bos. For an insight into Arnau's medical conception, his sources, and his terminology, see M. McVAUGH, *Arnau de Vilanova and the Pathology of Cognition*, in G. FEDERICI-VECOVINI, V. SORGE, C. VINTI eds., *Corpo e anima, sensi interni e intelletto dai secoli XIII-XV ai post-cartesiani e spinoziani*, Brepols, Turnhout 2005, pp. 119-138. For the impact of Arnau's translation on Latin tradition and, in particular, on Peter of Zealand, see J.-M. MANDOSIO,

3. The translation made between ca. 1487 and 1520 by Andrea Alpago (1450-1521), who revises the former translation by Arnau de Vilanova²⁵.

As to the translations in modern languages, apart from the aforementioned Turkish and Uzbek translations, there are:

1. a partial English translation made by O. C. Gruner in 1930 and included in his translation of Avicenna's *Qānūn*²⁶;

2. an Urdu translation, dependent on four manuscripts, which has been made by Hakim Abdul Latif in 1956²⁷;

3. a complete, English translation made by H. Abdul Hameed in 1983, about which it is hard to say on which Arabic text it is based²⁸.

Persian and Hebrew translations of the work are also attested²⁹.

The Use of al-Kindi's Treatise On Rays in Peter of Zealand's Elucidation of Marvelous Things (end of the 15th century), « Micrologus. Nature, Sciences and Medieval Societies », The Impact of Arabic Sciences in Europe and Asia, 24, 2016, pp. 425-456, in part. pp. 430-431. It is noteworthy that in the title of the edition of the Latin traslation of the *Qānūn*, the *Adwiya Qalbiyya*, and the *Urğūza fī l-ṭibb* (*Poem of Medicine or Cantica*) published in Basel in 1556, the name of Gerard of Cremona is mentioned as the first translator not only of the *Qānūn*, but also of the *Adwiya Qalbiyya* and of the *Urğūza*: 'Avicennae medicorum Arabum principis, Liber Canonis, De Medicinis Cordialibus et Cantica, iam olim a Gerardo Carmonensi ex Arabico Sermone in Latinum conversa, postea vero ab Andrea Alpage Bellunensi, philosopho et medico egregio, infinitis pene correctionibus ad veterum exemplarium Arabicorum fidem in margine factis ... decorata'. However, among the translations attributed to Gerard of Cremona there is no trace of the *Adwiya Qalbiyya* or of the *Urğūza*, which was translated for the first time by Armengaud Blaise, Arnau's nephew. Therefore, it might well have been the case that the name of Gerard of Cremona has been related to the Latin translation also of these two works because of their mention in the title of the Basel edition together with the *Qānūn*. On this issue, see AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V cit., p. 98*, n. 28, and VAN RIET, *Trois traductions* cit., pp. 341-342.

²⁵ *Principis Avicennae Liber Canonis necnon de Medicinis cordialibus et Canticis ab Andr[ea] Bell[unensi] ex antiquis Arabum originalibus ingenti labore summaque diligentia correcti atque in integrum restituti una cum interpretatione nominum Arabicorum quae partim mendosa partim incognita lectores antea morabantur*, Giunta, Venetiis 1527.

²⁶ O. C. GRUNER, *A Treatise on the Canon of Medicine of Avicenna*, Luzac & Co., London 1930.

²⁷ *Kitāb al-Adwiyat [sic] al-Qalbiyah* by Ibn Sīnā, translated by H. A. LATIF, Iran Society, Calcutta 1956, pp. 31-122. The four manuscripts on which it is based are (the list number is that of the inventory provided as Appendix 1): 33) London, British Library, Or. 5280; 34) London, British Library, Or. 5719; 46) St. Petersburg, State University Library, 171 Rosen; with the addition of a not further specified manuscript from New Delhi. For the notice on this translation see KHAN, *Ibn Sina's Treatise* cit., p. 49, and the preface (p. 7) by Hakeem Abdul Hameed to the English translation of the *Adwiya Qalbiyya* (see n. 28 below).

²⁸ *Risāla al-Adwiya al-qalbiyya. Avicenna's Tract on Cardiac Drugs and Essays on Arab Cardiotherapy*, H. A. HAMEED ed., Institute of History of Medicine and Medical Research, New Delhi, India - Institute of Health and Tibbi (Medical) Research Karachi, Pakistan, Hamdard Foundation Press, Karachi 1983.

²⁹ See, for example, ms. Leiden, Universiteitsbibliotheek, Or. 4719 preserving an anonymous Hebrew translation of the *Adwiya Qalbiyya*. On these translations see the book review M. S. KHAN, *Avicenna's Tract on Cardiac Drugs and Essays on Arab Cardiotherapy*, ed. By H. A. Hameed (New Delhi and Karachi) 1983, pp. 216, « Indian Journal of History of Science », 21/1, 1986, pp. 77-83, in part. p. 78.

2. THE REASONS FOR AL-ĞŪZĞĀNĪ'S SELECTED INSERTION

The most fundamental issue that the reader has to address in approaching this text is the reason why al-ĞŪzğānī decided to insert this excerpt from the *Adwiya Qalbiyya* between the fourth and the fifth treatise of Avicenna's *Nafs*.

D. Gutas briefly suggested that al-ĞŪzğānī «added some passages from this treatise at the end of the Book Four, Section Four of the *De anima* of the *Šifā'* (*Nafs* 201 Rahman) manifestly because in the last lines of that section Avicenna says that he treated extensively that subject in his medical books (*fī kutubinā ṭ-ṭibbiyya* [IV, 4, p. 201, 13]) »³⁰. Although I agree that the reference to the *medical books* at the end of *Nafs*, IV, 4 might have prompted al-ĞŪzğānī to insert this excerpt, the reason why he chooses precisely this work, and precisely chapters 2-9, remains to be explained. However, in order to answer these sub-questions, it is necessary to outline the context of the insertion.

After having provided the theoretical framework of the investigation of the soul (treatise I), having inquired into the external senses with the exclusion of sight (treatise II), having provided a close scrutiny of vision (treatise III), and before dealing with the intellect and its most specific activity (treatise V), Avicenna devotes the fourth treatise of his *Nafs* to the investigation of the internal senses³¹. This treatise consists of four chapters: IV, 1 contains a general survey of the internal senses belonging to animals³²; IV, 2 deals with the imagery or form-bearing faculty, the imaginative or cogitative faculty, and a mode of prophecy related to the imaginative faculty ('imaginative prophecy')³³; IV, 3 inquiries into estimation and memory³⁴; and IV, 4 deals with the locomotive faculty and

³⁰ GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., p. 514.

³¹ For this reason in some manuscripts this treatise bears the general title '*On the internal senses*' (*Fī l-ḥawāss al-bāṭina*). In *Nafs*, I, 5 Avicenna lists internal senses and their functions as follows: *al-ḥiss al-muṣṭarak* (or *baṭṭāsiyā/fanṭāsiyā*), the 'common sense', in which the data perceived by the external senses are collected and distinguished; *al-muṣawwira*, the 'form-bearing faculty' or *al-ḥayāl*, 'imagery', in which the sensible forms perceived by the common sense are collected; *al-mutaḥayyila*, the 'imaginative faculty' or 'imagination', which combines or distinguishes the sensible forms and which is called *al-mufakkira*, the 'cogitative faculty', when it is used by the intellect in order to combine or distinguish concepts; *al-waḥm*, 'estimation', which perceives the non-sensible attributes of what is perceived by the external senses; *al-ḥāfiẓa* or *al-mutaḍakkira*, 'memory', in which the attributes and the notions perceived by estimation are collected.

³² [Chapter] containing a general discourse on the internal senses belonging to animals.

³³ [Chapter] on the activities of the form-bearing and the cogitative faculties among these internal senses, and containing the discourse on sleep, wakefulness, the true and false vision and a mode of the properties of prophecy.

³⁴ [Chapter] on the activities of the faculty of memory and estimation and on the fact that all their activities make use of bodily organs.

a mode of prophecy related to it ('operative prophecy')³⁵. In particular, in this chapter Avicenna distinguishes the perceptive faculties to which judgment and perception pertain, from desire, which propels the living being to locomotion; in this context he singles out the branches of the desiderative faculty, i.e. the irascible and the concupiscible faculty, and their accidents, such as fear, sadness, grief, etc., and he says that these accidents belong primarily to the soul insofar as it is in the body, and only derivatively to the body, on which they can act by changing its temperament, and in which at the same time they begin to exist. After having described the soul's capacity to act on its own body, Avicenna describes the soul's capacity to act on a different body: this is the 'operative prophecy' belonging to the prophet's soul. Then, he points out the corruptibility of all animal faculties, and adds a conclusive remark:

Text 2. *Nafs*, IV, 4, p. 201, 13-16 [p. 67, 70-75]:

«We have already dealt in our medical books (*fī kutubinā al-tibbiyya*) with the cause (*sabab*) of the dispositions of individuals, who differ in their temper and according to the difference of their states, towards happiness, sadness, anger, forbearance, rancour, blamelessness, etc., in a way that is not found in the predecessors (*li-l-mutaqaddimīna*) in similar detail and [degree of] validation (*fī taḥṣīlihi wa-taḥṣīlihi*). Then, let it be read there ».

In these conclusive lines Avicenna mentions again the accidents of the branches of the desiderative faculty he has dealt with before in the same chapter (pp. 196, 1 - 197, 11), in order to add that, if one wishes to know the cause of the different dispositions of individuals towards these accidents, he should look to not further specified *medical books* where this subject is extensively treated. However, Avicenna does not limit himself to this footnote-like comment, but specifies the value of the text he is referring to: it is unparalleled in terms of articulation and precision (*taḥṣīl*)³⁶, and ascertainment and validation (*taḥṣīl*) of the investigation in that field; thus, it represents a valuable supplement to the treatment of individual dispositions in the *Nafs*. Avicenna seems therefore to have a precise work in mind. Al-Ġūzġānī spells out this reference by adding here chapters 2-9 from the *Adwiya Qalbiyya*.

The fact that al-Ġūzġānī interpreted Avicenna's reference to the *medical books* and his praise for the uniqueness of the investigation conducted therein as

³⁵ [Chapter] on the states of the locomotive faculties and a mode of prophecy connected with them.

³⁶ On Avicenna's use of *taḥṣīl*, see A. BERTOLACCI, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā'*. A milestone of Western Metaphysical Thought, Brill, Leiden - Boston 2006, p. 611, n. 23.

a reference to the *Adwiya Qalbiyya* might be explained by considering a passage from the *Qānūn* where Avicenna deals with the anatomy and the affections of the heart, and outlines the peculiar character of the *Adwiya Qalbiyya*.

Text 3. *Qānūn*, III, xi, i, 7, pp. 406, 23-407, 1 [*Liber III, Fen XI, Tractatus I, cap. 6, p. 277f, 23-26*]:

« *Chapter [concerning] the general rules of the medical treatment of the heart.*

We have [composed] a separate treatise (*maqāla mufrada*) on cardiac remedies (*fī l-adwiya al-qalbiyya*). When someone combines his knowledge of medicine with his knowledge of the fundamental principles that are more general than [the principles of] medicine (*idā ǧama'a al-insān bayna ma'rifatihī bi-l-ṭibb wa-ma'rifatihī bi-l-uṣūl allatī hiya a'ammu min al-ṭibb*), he takes advantage of it (*intafa'a bihā*)³⁷. But for now, we will point out what must be said in standard medical books (*fī l-kutub al-ṭibbiyya al-sādiǧa*) ».

This passage is a *unicum* in the *Qānūn* (but also elsewhere) since it seems to be the only case — at least to my knowledge — of Avicenna's explicit reference to another of his works and in such a circumstantial manner. What is more, the *Adwiya Qalbiyya* seems also to enjoy a special status within Avicenna's medical writings since, unlike the 'standard medical books', it combines the knowledge of medicine with that of the fundamental principles (*uṣūl*), which transcends the boundaries of medicine, and properly pertains to philosophy.

Avicenna has clearly said not to approve this sort of combination in the case of medicine as well as in the case of other particular sciences. In the opening lines of the *Qānūn*³⁸, where the epistemological status of medicine is outlined, Avicenna maintains that its philosophical and epistemological underpinnings, that is, the theory and principles of humoral pathology, are given in natural philosophy — the theoretical science to which medicine is said to be subordinated — and declares that their investigation is off-limits to the physician, who has to accept them on authority; the reason is that the first principles of particular sciences are taken as granted in those sciences and proven demonstratively only

³⁷ I interpret the pronoun *hā* as a reference to the *maqāla* occurring in the preceding sentence. Although *hā* can be also referred to the *ma'rifa* in the same sentence, I think that here, in dealing with the advantage represented by a certain kind of knowledge, Avicenna is referring to the work (*maqāla*) containing that knowledge (*ma'rifa*), and not to the knowledge itself. For in the opening line of this chapter Avicenna defers the ascertainment of 'the general rules of the medical treatment of the heart' to a certain work, namely the *Adwiya Qalbiyya*, and then he goes on to explain the nature of this work and the advantage deriving from the knowledge of what is contained therein.

³⁸ For this passage, see *Qānūn*, p. 36, 3-17. This text has been translated and analyzed in D. GUTAS, *Medical Theory and Scientific Method in the Age of Avicenna*, in D. C. REISMAN ed., with the assistance of A. H. AL-RAHIM, *Before and After Avicenna. Proceedings of the First Conference of the Avicenna Study Group*, Brill, Leiden - Boston 2003, pp. 145-162, in part. pp. 149-151.

in other and higher sciences (this process continues until the first principles of all sciences are ultimately established in metaphysics³⁹). Among the things that the physician must accept on authority, Avicenna lists the psychic faculties, their existence, their number, and their location. Consequently, in dealing with the diseases related to and affecting the psychic faculties, Avicenna has to assume their ascertainment provided in natural philosophy and, notably, in psychology⁴⁰. This statement chimes with what Avicenna says in his *Risāla fī Aqsām al-‘ulūm al-‘aqliyya* (*Epistle on the Divisions of the Intellectual Sciences*), where he classes medicine as a derivative natural science (*al-ḥikma al-ṭabī‘iyya al-far‘iyya*)⁴¹. Then, despite its being part of Avicenna’s medical corpus, the *Adwiya Qalbiyya* somehow contravenes what has been posited in the *Qānūn*, and stands at the crossroads between (natural) philosophy and medicine. The preeminence that Avicenna seems to assign to the *Adwiya Qalbiyya* among his medical writings⁴² in the *Qānūn* and obliquely in the *Nafs*, together with the specific subject of this treatise, might have precisely been the reason for al-Ġūzġānī’s insertion.

In addition to this, Avicenna’s *Qānūn* seems to provide a supplementary reason for al-Ġūzġānī’s insertion. In the first book Avicenna recalls the psychological basis of the medical investigation, which has to be assumed by the physician and investigated by the natural philosopher, as has already been

³⁹ For the fact that the principles of each particular science are investigated by and ultimately founded in metaphysics, see *Ilāhiyyāt*, I, 2, pp. 14, 18-15, 3 (Cairo ed.) [p. 15, 72-77 (Van Riet ed.)], and 3, p. 18, 12-17 [p. 20, 67-76]. On this passage, see BERTOLACCI, *The Reception of Aristotle’s Metaphysics* cit., in part. pp. 124-125. Avicenna might have drawn the idea of the subalternation of the particular sciences to a common, higher science (= metaphysics?) that proves the principles of the other, subordinated sciences, from Themistius’ paraphrase of Aristotle’s *Post. An.*, I, 9, 76a8-17. On this topic, see A. BERTOLACCI, *Avicenna and Averroes on the Proof of God’s Existence and the Subject-Matter of Metaphysics*, «Medioevo», 32, 2007, pp. 61-97, in part. p. 72.

⁴⁰ It is noteworthy that the theoretical underpinnings of Avicenna’s medical investigation, to which he refers in the first part of the *Qānūn*, seem to be derived from Galen’s works instead of — for example — from the part on natural philosophy of Avicenna’s *summae*. On the relationship between the first part of Avicenna’s *Qānūn* and the natural philosophy of the *Šifā’*, see my forthcoming paper *Avicenna’s treatment of nutrition in psychology and medicine: Intersection or Subalternation?*.

⁴¹ See IBN SĪNĀ, *R. fī Aqsām al-‘ulūm al-‘aqliyya*, in *Rasā’il fī l-ḥikma wa-l-ṭabī‘iyyāt*, 2 vols., Dār al-‘arab, Cairo 1980², p. 110, 8-10. On the relationship between medicine and philosophy, see P. E. PORMANN, *Avicenna on Medical Practice, Epistemology, and the Physiology of the Inner Senses*, in P. ADAMSON ed., *Interpreting Avicenna*, Cambridge University Press, Cambridge 2013, pp. 91-108, in part. pp. 92-95; and my forthcoming paper *Avicenna’s treatment of nutrition in psychology and medicine*.

⁴² The preeminence of the *Adwiya Qalbiyya* among Avicenna’s medical works is attested also in the Latin tradition where it circulated together with the *Qānūn* and the *Urġūza*. In a document dated to 19th January 1524, in which Paolo, Andrea Alpago’s nephew, asks the Venetian senate the permission to publish his uncle’s translations, the *Adwiya Qalbiyya* is referred to as *Sextus de viribus cordis*, that is, the *Sixth* [book of the *Qānūn*] on *cardiac faculties*, probably due to the mode of their circulation. On this fact, see VAN RIET, *Trois traductions* cit., p. 341.

said. There, in outlining what the vital faculty (*quwwa ḥayawāniyya*, *virtus vitalis*) is according to physicians⁴³, Avicenna maintains that some issues concerning this as well as other psychic faculties cannot be settled in medicine, because they involve philosophical notions like unity and multiplicity. Therefore, only philosophy, notably natural philosophy, is entitled to deal with them. For instance, Avicenna does not answer the question, about which physicians and philosophers disagree, as to whether there is one soul for each activity in each limb or there is one single soul from which different faculties with different activities emanate in limbs⁴⁴. Or, in a more specific context, he does not answer the question as to whether the vital faculty, which has anger, fear, and the like as its own affections caused by another faculty, is for this very reason one or many, but defers the settlement of this issue to natural philosophy⁴⁵.

Now, the general question concerning the unity or multiplicity of the soul is actually answered in *Nafs*, V, 7, where the soul is said to be the incorporeal bond (*ribāṭ*, p. 253, 3, 6 [*vinculum*, p. 158, 95, 00]), that is, the unifying principle, of the psychic faculties observable in bodies. By contrast, no answer to the specific question about the vital faculty can be found therein, and this is because there is no reference to the vital faculty in Avicenna's *Nafs* in particular, and in his psychology in general⁴⁶. As we have said, in *Nafs*, IV, 4 Avicenna briefly maintains that anger, fear, and the like are accidents of the two branches of the desiderative faculty⁴⁷, and that different bodily temperaments dispose individuals towards these different accidents. However, in the *Adwiya Qalbiyya*, and precisely in the chapters added by al-Ğūzğānī, Avicenna, though not mentioning the vital faculty to which in the *Qānūn* emotions are said to be

⁴³ *Qānūn*, I, i, vi, 4, p. 126, 19-21 [*Liber I, Fen I, Doctrina VI*, cap. 4, p. 27a, 4-7]: «As for the vital faculty, they (sc. physicians) intend by it the faculty that, when it comes to be in the limbs, it prepares them to the reception of the faculty of sensation and motion, and to the activities of life, and [they] add to them (sc. to the activities of life) the motions of fear and anger because they find in that extension and contraction occurring to the pneuma related to this faculty». On the Galenic terminology of Avicenna's outline of psychology in medicine, see n. 50 below.

⁴⁴ *Qānūn*, I, i, vi, 4, p. 127, 18-20 [*Liber I, Fen I, Doctrina VI*, cap. 4, p. 27c, 39-41]: «[(...)], and likewise in each limb to each genus of activities — according to them (sc. physicians) — belongs another soul, therefore the soul would not be one single [thing] from which faculties emanate, or the soul would belong to the sum of this whole».

⁴⁵ *Qānūn*, I, i, vi, 4, p. 128, 4-7 [*Liber I, Fen I, Doctrina VI*, cap. 4, p. 27d, 60-63]: «And since anger, fear, and what is similar to these two are [each] an affection of this faculty (sc. of the vital faculty), although their (sc. of anger, fear, etc.) principle is sensation, estimation, and perceptive faculties, they are related to this faculty (sc. to the vital faculty). But the verified clarification (lit. the verification of the clarification) of this faculty, whether it is one or more than one, it pertains to the natural science, which is part of philosophy».

⁴⁶ See n. 50 below.

⁴⁷ With respect to the accidents of the irascible faculty Avicenna adds that they occur «with participation of the perceptive faculties» (*bi-mušāraka min al-quwā al-darrāka*, p. 196, 1-2 [*propter communionem quam habent virtutes apprehendentes*, p. 58, 27]).

linked⁴⁸, deals *ex professo* with anger, fear, and the like: they are received in the cardiac pneuma, of which they are affections, in accordance with the appropriate bodily temperament, and their cause is to be searched for in the perceptive faculties. Therefore, al-Ğüzğānī, who knew Avicenna's *Qānūn*, and commented upon some of its difficult passages, might have had this passage in mind, and decided to add chapters 2-9 of the *Adwiya Qalbiyya* at the end of *Nafs*, IV, 4 precisely because he deemed it a good supplement to the brief treatment of the same topic in the *Nafs*⁴⁹.

As has been said earlier, in the first part of the *Adwiya Qalbiyya* Avicenna provides a medico-psychological account of emotions and, in particular, of the cause of individual dispositions towards them, i.e. the qualities (thickness, fluidity, opacity, clarity) of the cardiac pneuma, which in turn can be modified by external factors. This account perfectly fits with their philosophical treatment as accidents of the irascible and the concupiscible faculty in the *Nafs*, and with the deferment of the ascertainment of their cause to another work (possibly to the *Adwiya Qalbiyya*). Moreover, on a general level, despite the presence of Galenic terminology here and there⁵⁰, and the Galenic influence on the treatise⁵¹, the *Adwiya Qalbiyya* exhibits a cardiocentrism, though limited to the treatment of emotions and cardiac diseases⁵², that is in line with Aristotle's view: in this way, the theoretical framework of the investigation conducted in the *Adwiya Qalbiyya* does not seem to conflict with the Aristotelian orientation of Avicenna's *Nafs*, in

⁴⁸ See n. 45 above.

⁴⁹ The fact that for al-Ğüzğānī it was natural to look in the *Šifā'* for the philosophical background that the *Qānūn* presupposes, can be easily explained since these two works have been conceived as complementary, one providing the theoretical background of the other. This complementarity is not only reflected in structural analogies and cross-references, but also emerges from Avicenna's teaching praxis. For in his *Biography* it is reported that, during his stay in Hamadān (1015-1024) serving at the court of the Kākūyid emir Šams al-Dawla, Avicenna wrote the part on natural philosophy of the *Šifā'*, approximately ten years later the completion of the first book of the *Qānūn*, and gave lessons to a certain number of students who every night gathered in his house, and read in parallel passages from the two works. See *The Life of Ibn Sina. A Critical Edition and Annotated Translation*, ed. GOHLMAN cit., pp. 54.4 - 56.1.

⁵⁰ It is noteworthy that in the *Adwiya Qalbiyya* Avicenna refers to the Galenic tripartition of the faculties of the soul into natural (*ṭabī'iyya*), vital (*ḥayawāniyya*), and psychic (*naḥsāniyya*) faculty, which are in turn related to three different types of pneuma. See, for example, the mention of *quwā naḥsāniyya* (pp. 8, 13; 9, 5 [*virtutes animales*, pp. 195, 40; 196, 53]); *quwwa ḥayawāniyya* (p. 9, 2 [*virtus spiritualis*, p. 196, 49]); *quwwa ṭabī'iyya* (p. 12, 4, 5, 12 [*virtus naturalis*, pp. 201, 31-2, 33; 203, 46]). On this terminology, see my forthcoming paper *Avicenna's treatment of nutrition in psychology and medicine*.

⁵¹ See, in particular, Avicenna's statements about the anatomy and physiology of the heart and the circulation of blood.

⁵² In the *Adwiya Qalbiyya* Avicenna specifies that the primacy of the heart, on the creation of which depends the creation of all other organs, is a debated issue (*bi-ḥasabi iḥtilāf al-mağāhib fi dālika al-wāḥid*, p. 2, 6-7).

which however there are many medical teachings (cavities of the brain, nerves, etc.), as well as of the *Šifā'* in its entirety.

In this connection, the reason for al-ĞŪZĞĀNĪ's selected insertion can be easily explained. First of all, the choice to add chapters 2-9 by skipping chapter 1 seems to have been dictated by reasons of both accuracy and argumentative strategy. As for the accuracy, chapter 1 belongs to the first, medico-psychological part of the treatise, and therefore it ideally fulfills the requirements for being inserted within the *Nafs* together with chapters 2-9; however, precisely because of the issues treated therein, its content partially overlaps that of *Nafs*, V, 8, where the primacy of the heart over other bodily organs, its physiology, and the cardiac pneuma are dealt with, and therefore its addition to the *Nafs* would have been redundant. As for the argumentative strategy, in this chapter the centrality of the heart and of its pneuma as a vehicle for the psychic faculties is maintained⁵³; however, this does not automatically imply an absolute cardiocentrism, namely that the heart is the source of all psychic faculties, as Aristotle maintained. In particular, in the brief doxography provided therein, Avicenna contrasts the opinion ascribed to 'the greatest of philosophers' (*ağallu al-ḥukamā'*, p. 2, 8, probably a reference to Aristotle), according to which the heart is the source of all psychic faculties, and that ascribed to not further specified opponents (*muḥālifūna*, p. 2, 14, probably a reference to Galen and his followers), according to which the source at least of the perceptive faculties is the brain. Therefore, given that the correctness of the Aristotelian position was not unequivocally established, al-ĞŪZĞĀNĪ might have considered it wiser not to include this chapter among those of his insertion.

Secondly, in chapters 2-9 there are at least three passages in which the aforementioned theoretical proximity between natural philosophy and medicine is explicitly stated. They are tellingly placed at the beginning, in the middle, and at the end of the text of the insertion. The first passage has a general tone: it shows that 'the philosophers and those of the physicians who followed them' (*al-ḥukamā' wa-atbā'uhum min al-aṭibbā'*, p. 5, 2, *sapientes et sequaces eorum*, p. 190, 47) agree upon the fact that happiness, sadness, fear, and anger are among the affections that are proper to the cardiac pneuma⁵⁴. On a less general level, in the second passage a parallel is established between the inquiry Avicenna is embarking on, i.e. that into the conditions of happiness and sadness, which are the strength/weakness of the psychic faculties and

⁵³ *Edviyei Kalbiye* (Arabic text), ed. KILIŞI, p. 1, 7-8: « God — may He be praised — created the left ventricle of the heart, depository (*hizāna*) of the pneuma and origin (*ma'din*) of its generation, and created the pneuma as vehicle (*maṭiyya*) of the psychic faculties by means of which they penetrate in the bodily limbs ».

⁵⁴ *Ibid.*, p. 5, 2-3 [p. 190, 47-49].

the quality of the pneuma, and a similar investigation conducted in natural philosophy (*wa-ammā al-naẓar alladī huwa ašbahu bi-l-baḥṭ al-ṭabīʿi fa-li-anna* [...], p. 12, 3, *Quod autem magis convenit speculationi naturali considerare, hoc est quod* [...], p. 201, 30), which might be interpreted as a perspective reference to *Nafs*, IV, 4, p. 196, 1-8 where Avicenna hints at the way in which affections occur in the branches of the desiderative faculty⁵⁵. Lastly, on a more specific level, the third passage exhibits something more than a general theoretical proximity of (natural) philosophy and medicine, namely a real dependence of the medical discourse on the psychological investigation: for there the treatment of rancour (*ḥiqd*, p. 15, 2, *memoria iniuriarum*, p. 207, n. 27) and the consequent desire for revenge (*al-šawq ilā l-intiqām*, p. 15, 2, *desiderium vindictae*, p. 207, 27) are explicitly associated to the operation of two internal senses, i.e. imagery (*ḥayāl*, *imaginatio*) and memory (*dīkr*, *memoria*)⁵⁶.

Thirdly, in chapters 2-9 there are what al-Ġūzġānī may have considered as three perspective references to three different sections of the *Šifāʾ* (I say *perspective references* because Avicenna wrote the *Adwiyā Qalbiyya* in 1014-15, and the *Šifāʾ* between 1020-1027)⁵⁷. The first reference occurs at p. 6, 7-8 [p. 192, 76-77, in the Latin translation the mention of the title of the work is missing]. There, in arguing that happiness is a sort of pleasure, and in explaining how it can be experienced, Avicenna provides the principle according to which misconception (*sahw*, *error*) derives from taking what is *per accidens* in lieu of what is *per se* by referring in general terms to *Kitāb Sufistiqā* (*Book of Sophistics*), by which he might refer to Aristotle's *Sophistical Refutations*. In the *Šifāʾ* Avicenna expounds this doctrine in *Safsāṭa* (*Sophistics*), I, 3, pp. 20, 8 - 21, 10 where this type of misconception is treated⁵⁸. The second reference occurs at p. 7, 7-9 [p. 193, 3-5], where the cause of the disposition towards pleasure is said to be the quality and the quantity of the pneuma. The relation of the disposition to perceive pleasure to the characteristics of the substance of pneuma is justified by referring to another general principle, which has become clear in natural philosophy (*ʿalā mā tabayyana fī l-uṣūl al-ṭabīʿiyya, sicut declaratum est in principiis naturalium*): the more the substance in magnitude, the greater the power in strength. Al-Ġūzġānī might have connected this reference with *Afʿāl wa-Infiʿālāt* (*Activities and affections*) of the *Šifāʾ*, I, 4, since this chapter bears precisely the title: *Chapter on the notification of what is said about the fact that the more the*

⁵⁵ *Ibid.*, p. 12, 3 ff. [p. 201, 30 ff.].

⁵⁶ *Ibid.*, p. 15, 1 ff. [p. 207, 27 ff.].

⁵⁷ On the chronology of these Avicennian works, see GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., pp. 106-109; 514.

⁵⁸ *Safsāṭa* is the seventh section of the logical part of the *Šifāʾ*, corresponding to Aristotle's *Sophistical Refutations*.

*magnitude of bodies, the more their strength*⁵⁹. Lastly, at p. 10, 1-2 [p. 198, 74-5], in listing the causes of happiness and sadness, Avicenna refers to *Kitāb Riṭūriqā ay Kitāb al-Ḥiṭāba* (Books of Rhetoric)⁶⁰, possibly a reference to Aristotle's *Rhetoric*, where other causes of these two emotions are said to have been dealt with (*wa-ḡayr dālīka min al-umūr al-muḥṣā fī Kitāb Riṭūriqā ay Kitāb al-Ḥiṭāba, et cetera quae nominavimus in rhetoricis*). In the *Šifā'* Avicenna deals with the causes of these emotions in *Ḥiṭāba* (Rhetoric), III, 4⁶¹.

As for the exclusion of chapters 10-19 of the *Adwiya Qalbiyya* from al-Ğüzğānī's insertion, it can be easily explained by referring to their content: they are devoted to pharmacology, that is, to an aspect of practical medicine, which, unlike the medico-psychological discussion contained in chapters 2-9, does not fit with the philosophical treatment of the soul provided in the *Nafs*.

In sum, al-Ğüzğānī's choice of adding *Adwiya Qalbiyya*, 2-9 to *Nafs*, IV, 4 seems to be pertinent, and his operation accurate and informed.

3. THE ARABIC TEXTUAL TRADITION OF THE INSERTION

About the Arabic textual tradition of this insertion, Simone Van Riet simply says that «*plusieurs manuscrits arabes [du Šifā'] insèrent ces chapitres là où les situe la tradition manuscrite latine*»⁶². Therefore, we remain uninformed about the approximate amount of the many (*plusieurs*) Arabic manuscripts containing this insertion.

The current editions of the Arabic text of Avicenna's *Nafs* are of little help in that respect. As is common knowledge, there are five complete printed versions of Avicenna's *Nafs*, none of them providing a stemma codicum: (i) the Tehran lithography, published in Tehran in 1303/1885-6, which contains the natural philosophy and the metaphysics of the *Šifā'*, and is the reproduction of a manuscript, or a group of manuscripts, whose identity however has not been established yet; (ii) the edition made by Ján Bakoš in 1956⁶³, which is based on

⁵⁹ *Af'āl wa-Infi'ālāt* is the fourth section of the natural philosophy part of the *Šifā'*, corresponding to Aristotle's *Meteorology*, IV.

⁶⁰ *Kitāb al-Ḥiṭāba* is the eighth section of the logical part of the *Šifā'*, corresponding to Aristotle's *Rhetoric*.

⁶¹ The general impression is that in the *Adwiya Qalbiyya* Avicenna is referring to the Aristotelian tradition of these disciplines, namely sophistics, meteorology, rhetoric, perhaps as treated by himself in his pre-1015 writings, possibly in his early *summae* like the *Kitāb al-Maǧmū'* or *al-Ḥikma al-'Arūḍiyya* (*The Compilation or Philosophy for 'Arūḍī*), which was written approximately in 391H/1000-1 (see GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., pp. 86-93).

⁶² See n. 2 above.

⁶³ *Psychologie d'Ibn Sīnā* (Avicenne), d'après son oeuvre *al-Shifā'*, vol. I: Texte arabe, vol. II: traduction annotée, J. BAKOŠ ed., Travaux de l'Académie Tchèqueoslovaque des Sciences. Section de linguistique et de littérature, Prague 1956.

five manuscripts and the Tehran lithography; (iii) the edition made by Fazlur Rahman in 1959⁶⁴, which is based on eight manuscripts, the Tehran lithography, a manuscript containing the Latin translation of the work carried out in Toledo in the mid-twelfth century, and the Venice edition of the Latin text published in 1508; (iv) the edition made by G. C. Anawati and S. Zayed in 1975⁶⁵, which is based on the same manuscripts used by the two preceding editors with the addition of two more manuscripts; and, finally, (v) the edition made by Ḥ. Ḥ. al-Āmulī, for which, however, the manuscript basis is not clear⁶⁶.

The aforementioned editions (with the exclusion of the Tehran lithographed edition and the Āmulī edition), as well as the witnesses on which they are based are listed in the table below.

Table. 1

Manuscripts	Bakoš ed.	Rahman ed.	Anawati-Zayed ed.
Cairo, Maktabat Al-Azhar al-Šarīf, Beḥīt Collection 44988, 331 <i>falsafa</i>		x	x
Cairo, Dār al-Kutub al-Miṣriyya (now : Dār al-Kutub wa-l-Waṭā'iq al-Qawmiyya), 262 <i>ḥikma wa-falsafa</i>		x	x
Cairo, Dār al-Kutub al-Miṣriyya (now : Dār al-Kutub wa-l-Waṭā'iq al-Qawmiyya), 894 <i>falsafa</i>			x

⁶⁴ Avicenna's *De Anima* (Arabic Text), being the Psychological Part of *Kitāb al-Shifā'*, F. RAHMAN ed., Oxford University Press, London - New York - Toronto 1959; 1970².

⁶⁵ *Kitāb al-Shifā'*: *al-Ṭabī'īyyāt*, vol. 6: *al-Nafs*, G. C. ANAWATI, S. ZAYED eds., revised edition by I. MADKOUR, Al-Hay'a al-miṣriyya al-'amma li-l-kitāb, Cairo 1975.

⁶⁶ AVICENNA, *al-Nafs min kitāb al-Shifā'*, ed. Ḥ. Ḥ. AL-ĀMULĪ, Maktab al-l'lām al-Islāmī, Markaz al-Nashr, Qum 1417/1996-7. In the introduction (p. 6) Āmulī writes that he used several manuscripts of the *Šifā'* preserved in his collection; however, he does not provide any description of them. From the images printed at the end of his edition, it can be inferred that he had at least five manuscripts at his disposal: 1) a manuscript copied by Muḥammad ibn Muḥammad Ġa'far, known as Ḥalīl, on Saturday 15 Šawwāl 1128H/2 October 1716 (pp. 369-370); 2) a manuscript copied in Safar 1011H/July-August 1602 (pp. 371-72); 3) a manuscript, containing the *Nafs* together with the excerpt from the *Adwīya Qalbiyya*, dated to XI/XVII on the basis of the handwriting (p. 373); 4) a manuscript, containing the *Nafs* and the *Kitāb al-Nabāt* (*Book of Plants*), i.e. the seventh section of the natural philosophy part of the *Šifā'*, dated after XI/XVII on the basis of the handwriting (p. 374); 5) a manuscript dated after IX/XV on the basis of the handwriting (pp. 375-376).

Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822		x	x
Leiden, Universiteitsbibliotheek, Or. 4 (Golius Collection) (Catalogue CCO, n. 1444)		x	x
Leiden, Universiteitsbibliotheek, Or. 84 (Golius Collection) (Catalogue CCO, n. 1445)		x	x
London, India Office (now : British Library, Oriental and India Office Collections), Ar. 1796 (n. 476 in Loth catalogue)	x	x	x
London, British Museum (now : British Library, Oriental and India Office Collections), Or. 2873 (British Museum Suppl. 711)	x		x
London, British Museum (now : British Library, Oriental and India Office Collections), Or. 7500			x
Oxford, Bodleian Library, Pococke 114	x		x
Oxford, Bodleian Library, Pococke 116	x	x	x
Oxford, Bodleian Library, Pococke 125	x	x	x
Tehran, Lithographed edition	x	x	x
Basel, D III 7 (Latin translation)		x	x
Venice edition (Latin translation)		x	x

In the critical apparatus of their editions, Bakoš and Rahman note that between the fourth and the fifth treatise of the text of Avicenna's *Nafs*, some of the manuscripts on which their editions are based contain an excerpt from Avicenna's *Adwiyā Qalbiyya*⁶⁷. However, after having verified that this insertion was extraneous to the text of the *Nafs*, they both decided not to print it. What happened in the Cairo edition is more baffling: although some of the manuscripts

⁶⁷ *Psychologie d'Ibn Sīnā (Avicenne)*, p. 197, n. 6; *Avicenna's De Anima (Arabic Text)*, p. 201, n. 11.

consulted contain the insertion — as the direct inspection of these manuscripts discloses — the editors did not even record its presence in their apparatus⁶⁸.

In my current research I have drafted a provisional list of 172 manuscripts containing the second part of Avicenna's *Šifā'*, i.e. that on natural philosophy. 130 of these manuscripts⁶⁹ contain the *Nafs*: of the 89 manuscripts that I have inspected, however, only 84 have been taken into account since 5 manuscripts do not contain the fourth treatise at the end of which the excerpt is inserted⁷⁰. Only 23 manuscripts contain al-Ğüzğānī's insertion (24 if we consider the information provided by F. Rahman about the ms. Cairo, Dār al-Kutub al-Miṣriyya, 262 *ḥikma wa-falsafa*, as containing the entire insertion, to which I did not have direct access). Besides these manuscripts, two more manuscripts, though not containing the insertion, have some references to the *Adwiya Qalbiyya*⁷¹.

That this portion of text is extraneous to Avicenna's *Nafs* is reflected in the table of contents that 13 manuscripts over the 23 containing the insertion⁷² provide at the beginning of the fourth treatise. There, this insertion is not indicated as part of the fourth treatise. What is more, in ms. Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2441, f. 233r. the copyist points out the peculiar nature of this text by writing at the end of *Nafs*, IV, 4: « *And the discourse by Abū 'Ubayd al-Ğüzğānī follows it [sc. the fourth treatise] before the fifth treatise* » (*wa-yatlūhā kalām li-Abī 'Ubayd al-Ğüzğānī qabla al-maqāla al-ḥāmisa*).

In addition to the incipit and the explicit (see Text 1 above), in some of these manuscripts the insertion is also indicated in the margin. Two examples can be provided. (i) In ms. Tehran, Kitābhānah-i Milli Ğumhūrī-yi Islāmī-yi Iran (National Library), 1327, p. 126, the Persian note '*Ğüzğānī's addition to the Šifā'*' (*afzuda Ğüzğānī bar Šifā'*) can be read in the margin⁷³; perhaps in order to render immediately visible the extraneousness of this text to the work in which it is included. (ii) In ms. Cairo, Maktabat Al-Azhar al-Šarīf, Beḥīt Collection 44988, 331 *falsafa*, f. 274r, there is an important marginal note. This note, which has been misunderstood

⁶⁸ *Kitāb al-Šifā'*: *al-Ṭabī'īyyāt*, vol. 6: *al-Nafs*, p. 178.

⁶⁹ A list of the 130 manuscripts is provided as Appendix II at the end of the present article.

⁷⁰ These five manuscripts are (the list number is that of the inventory provided as Appendix II): 39) Istanbul, Süleymaniye Kütüphanesi, Carullah 1333 (this ms. has actually a lacuna between *Nafs*, IV, 3 and V, 7); 77) Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī, 771; 85) Oxford, Bodleian Library, Pococke 114; 86) Oxford, Bodleian Library, Pococke 116; 94) Qum, Markaz-i Iḥyā' -i Mīrāt-i Islāmī, 3054.

⁷¹ In ms. Leiden, Universiteitsbibliotheek, Or. 4, f. 251r there is the entire text of the incipit of the insertion in the margin in correspondence with the end of the fourth treatise; and in ms. Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī, 13963, f. 99v in the margin there is the reference to the *Adwiya Qalbiyya* in correspondence with Avicenna's reference to his medical books ('*min kutubihī al-muštāmila 'alā mā ḍakara kitābuhū fī l-adwiya al-qalbiyya*', [reference] from his books [sc. Avicenna's medical books] including what his book On Cardiac Remedies mentioned).

⁷² The other 10 manuscripts do not provide any table of contents of the fourth treatise.

⁷³ I wish to thank dr. Ivana Panzeca for having helped me read this note.

by D. al-Yāsīn⁷⁴, shows that the insertion was not attested in all the manuscripts consulted by the copyist, and that in all likelihood it was retrieved by means of collation: «*what al-Ğüzğānī added [sc. to the Kitāb al-Nafs] is what is written on two folios from here, which is found in some manuscripts, while is not found in some other*» (*allatī alḥaqahū al-Ğüzğānī al-maktūb fī l-waraqatayni min hāhunā fī ba'd al-nusah mawğūd wa-fi ba'ḍihā lā yakūnu mawğūdan*). This is clearly visible since two folios containing the insertion have been physically added to the codex.

As for the text of the insertion, the manuscripts do not attest significant variants⁷⁵. By contrast, they attest different divisions of the text: in 13 manuscripts the insertion is divided into two chapters, the first corresponding to chapters 2-6 of the *Adwiya Qalbiyya*, and the second to chapters 7-9; in 4 manuscripts only the first chapter is indicated, while in 2 manuscripts only the second; and in 4 manuscripts the insertion has no internal division. Among the manuscripts indicating the second chapter (either alone or together with the indication of the first chapter) two manuscripts, i.e. ms. Cairo, Maktabat Al-Azhar al-Šarīf, Beḥīt Collection 44988, 331 *falsafa*, and ms. Istanbul, Süleymaniye Kütüphanesi, Ayasofya 2441, deserve particular attention because, in addition to the indication of the second chapter, they also attest a title for it, i.e. 'Chapter from the addition of Abū 'Ubayd' (*faṣl min ilḥāq Abī 'Ubayd*), which corresponds to the title attested in the Latin translation for this part of the insertion, i.e. 'Capitulum de additione Auohaueth' (p. 203, 54).

The research on the manuscript tradition of this insertion is in progress, and further discoveries both about the number of manuscripts of Avicenna's *Nafs* in general, and about the number of manuscripts containing the excerpt, are predictable. However, this scenario, namely the presence of al-Ğüzğānī's insertion in a relatively small part of the manuscript tradition⁷⁶, though provisional, can be explained in four different ways.

⁷⁴ Al-Yāsīn misunderstands this note since on the basis of it and of the *explicit* of the insertion, he argues that the main text of this manuscript descends from an exemplar in the possession of al-Ğüzğānī. See *Al-Šifā', al-Ṭabī'īyyāt, I: al-Samā' al-ṭabī'ī*, ed. D. AL-YĀSĪN, Dār al-Manāhil, Beirut 1996, p. 25.

⁷⁵ What varies are the formulae that accompany the names of Avicenna and al-Ğüzğānī, like *rahimahū Allāh* (may God have mercy upon him), *adāmahū Allāh* (may God make him lasting), or *ḥuğğat al-ḥaqq* ('Proof of the Truth', an epithet that would have been more appropriate to a theologian than to a philosopher). However, these elements do not reveal anything about the history of the manuscripts and their copy (whether, for example, they have been copied before or after the death of Avicenna or al-Ğüzğānī).

⁷⁶ The fact that the insertion is attested in a relatively small part of the manuscript tradition might explain the *raison why*, unlike what happens in the Latin translation of Avicenna's *Nafs*, in the Latin translation of the insertion there is no trace of revision, as has been argued by S. Van Riet (AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus* IV-V cit., p. 99*): probably in the manuscript(s) on which the Latin translators of the *Nafs* based their revision — of course, if they are also the translators of the insertion — the insertion was not contained.

Firstly, there is the hypothesis according to which al-Ġūzġānī has inserted the excerpt from the *Adwiya Qalbiyya* in the copy he kept, i.e. in a sort of *school copy* of the work of his master, which is compatible with the information al-Ġūzġānī himself provides in the *Prologue* of the *Šifā* ' about his activity of secretary and amanuensis of Avicenna⁷⁷. This hypothesis is plausible on the proviso that al-Ġūzġānī's copy was the *official* copy from which all the other manuscripts, in different times, were copied. If this is the case, we have to suppose a progressive transformation of the copy that al-Ġūzġānī made from Avicenna's autograph: the copy containing the insertion would reflect a later stage of al-Ġūzġānī's copy, after other copies had already been made from its previous stages, still lacking the insertion. In this case, we would be facing a proper *editorial activity* on the part of al-Ġūzġānī, comparable, within the *Šifā* ', to his addition of a *Prologue*, and, outside the *Šifā* ', to his addition of the mathematical part to the *Naġāt* and to the *Dānešnāme-ye 'Alā 'ī*⁷⁸. This might provide an explanation of the reason why this insertion is present only in a small part of the manuscript tradition: this insertion would have occurred at a later stage of the hypothetical progressive transformation of the *official* copy made by al-Ġūzġānī.

The second hypothesis is that according to which al-Ġūzġānī would have inserted the excerpt from the *Adwiya Qalbiyya* in his personal working copy, and that small part of the manuscript tradition containing the insertion would depend on this 'private' copy. This hypothesis is plausible on the condition that the 23 manuscripts attesting the insertion share errors that can be explained only by supposing their dependence on a common sub-archetype. We would then not be facing a progressive transformation of al-Ġūzġānī's school copy and, consequently, an editorial activity on his part, but a case of vertical descent of a branch of the manuscript tradition from the manuscript in which the excerpt from the medical work was inserted for the first time, that is, al-Ġūzġānī's personal working copy.

The third hypothesis is that it might well have been the case that the insertion, regardless of where it was originally inserted (either in al-Ġūzġānī's official copy or in his personal copy), was so brazen that some copyists might have decided not to copy it, as the modern editors of the Arabic text of the *Nafs* have done. Or, a non-philosophical copyist, like a theologian, might have skipped the *Adwiya Qalbiyya* because he was not interested in it. In order for this hypothesis to hold

⁷⁷ See IBN SİNĀ, *al-Šifā* ', *al-Mantiq*, *al-Madhal*, eds. I. MADKŪR, G. Š. QANAWATĪ, M. AL-ĤUDAYRĪ, A. F. AL-AHWĀNĪ, AL-Maṭba'a al-amiriyya, Cairo 1952, p. 1, 16: « I concerned myself in keeping (*wa-atammu bi-l-ḍabt*) [what he wrote] ». The English translation of this passage is drawn from GUTAS, *Avicenna and the Aristotelian Tradition* (second edition) cit., p. 29.

⁷⁸ On other possible evidence of al-Ġūzġānī's editorial activity on the *Šifā* ', see the article by A. Bertolacci in the present volume.

true, all the manuscripts containing the insertion do not have to share errors that can be explained only by supposing a common sub-archetype.

The fourth and last hypothesis, which unlike the preceding three is not Lachmannian, is that according to which a scholar, who is also a copyist *per accidens*, might have retrieved the text of the insertion not because it was attested in the manuscript from which he made his copy, but because he knew that it was attested in another (now lost) important manuscript, belonging to al-ĞŪzğānī or to some other immediate follower of Avicenna, which circulated in his school or was at his disposal. This hypothesis is plausible on the proviso that all the 23 manuscripts attesting the insertion do not show decisive connections or errors that would require a common antigraph to be explained, and retrieve the insertion by means of collation from another manuscript, different from that from which the copy was made.

I do not have a definitive answer, and therefore I will limit myself to formulate some considerations. Although none of the aforementioned hypotheses can be easily ruled out, the deliberate exclusion of this insertion on the part of the copyists, which has been suggested in the third hypothesis, seems less likely, since the author responsible for the insertion is al-ĞŪzğānī, who is the authoritative and well-known author of the *Prologue* of the *Šifā'*. The other alternatives are more likely. I limit myself to observe that, although the second and the fourth hypotheses might appear the most straightforward in order to justify the limited presence of this insertion in the Arabic manuscript tradition, the first hypothesis has the advantage of being more consonant with the *incipit* of the insertion, namely with al-ĞŪzğānī's announcement of his — perhaps unaccomplished — programme of intervention on the *Nafs* of the *Šifā'*, which seems hard to reconcile with a mere annotation on his working copy. However, these are just preliminary and tentative hypotheses: the verification of their validity demands further investigation of the manuscript tradition.

4. EVALUATING THE RELEVANCE OF THIS INSERTION. A CONCLUSION

The aforementioned considerations lead to the final part of this article, namely the conclusive evaluation of the relevance of this insertion. There are several reasons why this insertion is worth being studied. Firstly, a close scrutiny of this insertion might cast some new light on al-ĞŪzğānī's editorial activity on the *Šifā'*. In particular, the *incipit* of this insertion and the specification that most of the inserted materials — *akṭaruhā* — are from the *Adwiya Qalbiyya* leave room for other potential insertions in this place of the *Nafs* from other Avicennian medical works on the part of al-ĞŪzğānī, although he never accomplished them.

Secondly, this insertion is crucial for the reconstruction of the Arabic text of Avicenna's *Adwiya Qalbiyya*: for the editors of this work have never taken

into consideration the manuscript tradition attesting only the insertion, which sometimes seems to witness a better text than that preserved by the manuscripts containing the entire work. Also Rifat Bilge Kilisli, who lists among the inspected manuscripts the ms. Istanbul, Süleymaniye Kütüphanesi, Damat İbrahim Paşa 822, which does contain only the insertion, does not seem to systematically use it in his edition. As to the Latin translation of the insertion, it is not only the most ancient, though partial, Latin translation of this work, but it is also more ancient than the most ancient manuscript used by Rifat Bilge Kilisli. For, the most ancient manuscript used by the Turkish editor, i.e. ms. Istanbul, Süleymaniye Kütüphanesi, Fatih Camii 5316, dates to 590H/1194, while the Latin translation of Avicenna's *Nafs* is dated around 1152-66 and, therefore, is based on a more ancient part of the Arabic manuscript tradition. What is more, according to S. Van Riet, the Latin translation of the insertion contained within the Latin translation of Avicenna's *Nafs* is more faithful to the original Arabic than the Latin translations made by Arnau de Vilanova and by Andrea Alpago⁷⁹.

Lastly, in virtue of its relatively limited presence in the Arabic manuscript tradition of Avicenna's *Nafs*, this insertion might represent a vantage point from which valuable data can be collected in order to circumscribe the part of the Arabic manuscript tradition on which the Latin translation of Avicenna's *Nafs* depends: to this day we do not know exactly on which Arabic manuscript(s) the Latin version is based. In this manner new light can also be shed on the broader picture of the overall stemma codicum of the *Nafs*: the study of this insertion, together with other data, might contribute to isolate a branch of the Arabic tradition of this text.

⁷⁹ VAN RIET, *Trois traductions cit.*, pp. 343-344.

APPENDIX I. INVENTORY OF THE MANUSCRIPTS CONTAINING THE *MAQĀLA FĪ L-ADWIYA AL-QALBIYYA*

This list gathers all the manuscripts preserving the *Maqāla fī l-adwiya al-qalbiyya* that have been mentioned by Brockelmann, Ergin, Mahdavi, and Gutas in their inventories, with the addition of some other manuscripts used by R. B. Kilisli and M. Z. al-Bābā, the editors of the Arabic text, and of some manuscripts that I have found in my research on the *Adwiya Qalbiyya*. The pieces of information concerning these manuscripts, e.g. foliation, dating, etc., have been drawn from the aforementioned sources. In square brackets it is also indicated whether the manuscripts have been consulted by the editors of the Arabic text.

Sigla:

B = C. BROCKELMANN, *Geschichte der Arabischen Litteratur* [sic], vols. I-II, Brill, Leiden 1898-1902; 1943-1949² (vol. I, p. 599); suppl. vols. I-III, Brill, Leiden 1937-1949 (suppl. vol. I, p. 827);

E¹ = O. ERGIN, *İbn-i Sina Bibliografyası*, in *Büyük Türk Filozof ve Tıp Üstadı İbn Sina. Şahsiyeti ve Eserleri Hakkında Tetkikler*, İstanbul 1937, pp. 3-80;

E² = O. ERGIN, *İbn-i Sina Bibliografyası*, Yalçın Matbaası, İstanbul 1956, p. 8;

G = D. GUTAS, *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*. Second, revised and enlarged edition, Brill, Leiden 2014, p. 515;

K = *Edviyei Kalbiye* (Arabic text), R. B. KILISLI ed., in *Büyük Türk Filozof ve Tıp Üstadı İbn Sina, Şahsiyeti ve Eserleri Hakkında Tetkikler*, İstanbul 1937, pp. 1-56;

M = Y. MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā*, Intiṣārāt-i Dāniṣgāh-yi Tihirān, Tehran 1333/1954, p. 24;

Z = *Min Mu'allafāt Ibn Sīnā al-ṭibbiyya*, M. Z. AL-BĀBĀ ed., *Ma'had al-turāt al-ilmī al-ʿarabī*, Aleppo 1404/1984, pp. 221-294.

1. Ankara Üniversitesi, Dil ve Tarih-Coğrafya Fakültesi (Faculty of Language, History, and Geography), Fund Ismail Saib I, 3471 (E¹);
2. Ankara Üniversitesi, Dil ve Tarih-Coğrafya Fakültesi (Faculty of Language, History, and Geography), Fund Ismail Saib I, 3674 (E¹);
3. Berlin, Deutsche Staatsbibliothek, 6359 (B, E², M, G);
4. Cairo, Dār al-Kutub al-Miṣriyya (now : Dār al-Kutub wa-l-Waṭā'iq al-Qawmiyya), Qawala, II, 290 (B);
5. Dublin, Chester Beatty Library, Ar. 3676, ff. 1r-43r (G);
6. Gotha, Forschungsbibliothek, 1995 (B, E², M, G);
7. Hyderabad, Osmaniya University Campus, Oriental Manuscript Library and Research Institute, Ar. 10^a (vol. 2);
8. Hyderabad, Osmaniya University Campus, Oriental Manuscript Library and Research Institute, 40585 (vol. 3);
9. İstanbul, Beyazıt Kütüphanesi, 'Umūmi 50 (E¹, B);
10. İstanbul, Köprülü Halk Kütüphanesi, 869, ff. 206v-219v (B, E¹⁻², M, G) [K];
11. İstanbul, Nuruosmaniye Kütüphanesi, 3456 (B, E¹⁻², M, G) [K];
12. İstanbul, Nuruosmaniye Kütüphanesi, 3590 (B, E¹⁻², M, G) [K];
13. İstanbul, Nuruosmaniye Kütüphanesi, 3494 (E¹, B);

14. Istanbul, Nuruosmaniye Kütüphanesi, 4894, ff. 316v-326v (E², M, G) [K];
15. Istanbul, Süleymaniye Kütüphanesi, Ayasofya 3699 (B, E¹⁻², M, G) [K⁸⁰];
16. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 822 (VI-VII/XII-XIII) (E², M, G) [K];
17. Istanbul, Süleymaniye Kütüphanesi, Efendi, Bagdatli Vehbi 1477 (B, E¹⁻², M, G) [K];
18. Istanbul, Süleymaniye Kütüphanesi, Esat Efendi 3790 (B, E¹⁻², M, G) [K];
19. Istanbul, Süleymaniye Kütüphanesi, Fatih Camii 3627 (B, E¹⁻², M, G) [K⁸¹];
20. Istanbul, Süleymaniye Kütüphanesi, Fatih Camii 5316 (590H/1194) (B, E¹⁻², M, G) [K];
21. Istanbul, Süleymaniye Kütüphanesi, Hamidiye 1448 (B, E¹⁻², M, G) [K];
22. Istanbul, Süleymaniye Kütüphanesi, Lâleli 1647 (B, E¹⁻², M, G) [K];
23. Istanbul, Süleymaniye Kütüphanesi, Şehid Ali Paşa 2031 (B, E¹⁻², M, G) [K];
24. Istanbul, Süleymaniye Kütüphanesi, Şehid Ali Paşa 2092 (E², M, G) [K];
25. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 2112 (E¹, B) [K];
26. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 2119 (E², M, G);
27. Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3447 (866H/1461-2) (B, E¹⁻², M, G) [K];
28. Istanbul, Üniversitesi Kütüphanesi Kütüphanesi, Yıldız 'Umūmī 343 [K];
29. Istanbul, Üniversitesi Kütüphanesi, 6172 (E², M, G);
30. Istanbul, Üniversitesi Kütüphanesi, Yıldız 'Umūmī 16917 (E¹, B);
31. Leiden, Universiteitsbibliotheek, Or. 958 (ex: 1330), ff. 255v-266v, (B, E², M, G)⁸²;
32. Leiden, Universiteitsbibliotheek, Or. 820 (ex: 1331), ff. 15r-28v, (B, G)⁸³;
33. London, British Library, Or. 5280 (B, M, G) [Z];
34. London, British Library, Or. 5719 (B, E², M, G);
35. Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī III, 9/14 (E², M, G);
36. Mosul, University Library, 14 (B, G);
37. Mosul, University Library, 260 (B);
38. Paris, Bibliothèque Nationale de France, Ar. 5966 (B) [Z];
39. Rampur, Rampur Raza Library, I, 477 (B);
40. Rampur, Rampur Raza Library, I, 495 (B);
41. Rampur, Rampur Raza Library, 3066 (alternative number 2-3206) [Z];
42. San Lorenzo de El Escorial (Madrid), Real Biblioteca del Monasterio de San Lorenzo de El Escorial, 844/5, ff. 48v-67r (B);
43. San Lorenzo de El Escorial (Madrid), Real Biblioteca del Monasterio de San Lorenzo de El Escorial, 855 (B);
44. San Lorenzo de El Escorial (Madrid), Real Biblioteca del Monasterio de San Lorenzo de El Escorial, 860 (B);

⁸⁰ R. B. Kilisli mentions this manuscript together with ms. Istanbul, Süleymaniye Kütüphanesi, Ayasofya 4795, which is said to be the apograph of the former.

⁸¹ R. B. Kilisli seems to refer to this manuscript by the shelfmark 3625 instead of 3267, possibly due to a misprint. He dates this manuscript to 678H/1279-80.

⁸² J. J. WITKAM, *Inventory of the Oriental manuscripts in Leiden University Library*, Ter Lugt Press, Leiden 2006-2016, p. 418.

⁸³ *Ibid.*, p. 348.

45. San Lorenzo de El Escorial (Madrid), Real Biblioteca del Monasterio de San Lorenzo de El Escorial, 875 (B);
46. St. Petersburg, State University Library, 171 Rosen (B, G);
47. Tehran, Kitābhānah-i Millī Malik, 2005 (E², M, G);
48. Tehran, Kitābhānah-i Millī Ğumhūrī-yi Islami-yi Iran (National Library), 9 (E², M, G);
49. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān (Central Library of Tehran University), Miškāt 861 (E², M, G);
50. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān (Central Library of Tehran University), Miškāt 1074 (E², M, G);
51. Tehran, Kitābhānah-i Markazī-yi Dānišgāh-i Tihrān (Central Library of Tehran University), Miškāt 1149, ff. 51r-61r (G);
52. Tehran, Kitābhānah-i Mağlis-i Shūrā-yi Millī (now: Kitābhānah-i Mağlis-i Shūrā-yi Islāmī = Parliament Library), Tangābunī 324 (E², M, G).

APPENDIX II. INVENTORY OF THE MANUSCRIPTS PRESERVING THE ARABIC TEXT OF AVICENNA'S *KITĀB AL-NAFS*

Sigla:

A = ms. recorded in G. C. ANAWATI, *Essai de bibliographie avicennienne*, Dār Al-Ma'ārif, Cairo 1950;

Liste = ms. recorded in G. C. Anawati's edition of the *Kitāb al-Nafs* (see n. 65 above);

Ah = ms. recorded in A. Q. AHMED, *The Shifā' in India I: Reflections on the Evidence of the Manuscripts*, « Oriens », 40, 2012, pp. 199–222;

PhiBor = ms. recorded in the inventory provided on the website of the ERC Advanced Grant project '*Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the Metaphysics (Ilāhiyyāt of Kitāb al-Šifā')* of Avicenna (Ibn Sīnā)' (<http://www.avicennaproject.eu>), or obtained within the framework of this project;

M = ms. recorded in Y. MAHDAVĪ, *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā*, Intiṣārāt-i Dānišgāh-yi Tihirān, Tehran 1333/1954;

An = ms. used in Anawati's edition of the Arabic text;

Ba = ms. used in Bakoš's edition of the Arabic text;

Ra = ms. used in Rahman's edition of the Arabic text;

+ m, r, i = ms. containing all the *Šifā'* (i.e. *manṭiq*, *riyāḍiyyāt*, and *ilāhiyyāt* in addition to *ṭabī'īyyāt*);

+ m, i = ms. containing *ṭabī'īyyāt*, *manṭiq* and *ilāhiyyāt*;

+ m = ms. containing *ṭabī'īyyāt* and *manṭiq*;

+ i = ms. containing *ṭabī'īyyāt* and *ilāhiyyāt*.

Within *manṭiq*, *ṭabī'īyyāt*, *riyāḍiyyāt*, and *ilāhiyyāt*, the sections (*funūn*) are designated by lower-case Roman numerals (i, ii, iii, etc.), whereas the treatises (*maqālāt*), and chapters (*fuṣūl*) are designated respectively by upper-case Roman numerals (I, II, III, etc.) and Arabic numerals (1, 2, 3, etc.). A date of copy in which the year is precisely indicated (e.g.: 1071H/1660-1) is usually taken from the manuscript itself (colophon or other), whereas a more generic date (e.g.: VII/XIII) is a tentative date provided by former inspectors of the codex.

* = ms. consulted;

bold = ms. attesting the insertion within the *Kitāb al-Nafs*.

Aligarh (Uttar Pradesh, India) (3 mss.):

- 1) Maulana Azad Library, Aligarh Muslim University, Subḥān Allāh 110/27 'A (M, PhiBor);
- 2) *Maulana Azad Library, Aligarh Muslim University, Subḥān Allāh 110/30 'A (1071H/1660-1; copyist: Muḥammad Ḥusayn al-Mašhadī) (+ m, r, i) (*Liste*, Ah, M, PhiBor);
- 3) Maulana Azad Library, Aligarh Muslim University, Subḥān Allāh 110/47 'A (*Liste*, Ah, M);

Baghdad (1 ms.):

- 4) *Maktabat al-Awqāf, 5353 (Catalogue 1953, n. 1523; Catalogue 1974, n. 3403) (885H/1480-1) (+ i) (PhiBor);

Beirut (Lebanon) (1 ms.):

- 5) *Université St. Joseph, Bibliothèque Orientale, 375 (1-10 Muḥarram 1021H/4-13 March 1612; copyist: Abū al-‘Ulamā’ Ibn ‘Alī al-Kāfir) (PhiBor);

Cairo (9 mss.):

- 6) ***Maktabat al-Azhar al-Šarīf, Beḥīt 331 falsafa (ḥuṣūṣiyya), 44988** (‘umūmiyya) (VII/XIII) (+ m, r, i) (*Liste*, M, PhiBor) (An, Ra);
 7) **Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya) 262 ḥikma wa-falsafa** (1337H/1918-9) (+ m, i) (*Liste*, M, PhiBor) (An, Ra);
 8) Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya) 675 *falsafa* (1177H/1763-4) (+ r) (*Liste*, M);
 9) Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya) 753 (1074H/1663-4) (+ m) (*Liste*, M);
 10) ***Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya) 894 falsafa** (X-XI/XVI-XVII; copyist: ‘Abd Allāh ibn Mīr ‘Abd Allāh) (+ m, r, i) (*Liste*, M, PhiBor) (An);
 11) Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya), Ṭal’ at 342 (*Liste*, M);
 12) Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya), Ṭal’ at 402 (*Liste*, M);
 13) Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya), Aḥmad Taymūr Pāšā 56 (*Liste*, M);
 14) *Dār al-Kutub al-Miṣriyya (now: Dār al-Kutub wa-l-Waṭā’iq al-Qawmiyya), Aḥmad Taymūr Pāšā 140 (27 Šawwal 535H/12 June 1141) (+ i; † incomplete: †_vi_I,4, p. 35, 4 [ed. Rahman]-vii) (*Liste*, M, PhiBor);

Damascus (2 mss.):

- 15) Maktaba Zāhiriyya (now: Maktabat al-Asad al-Waṭaniyya, Asad National Library), 7905 (1043H/1633-4; copyist: Šālīḥ Ibn Šarīf Ḥamid) (+ m, r, i) (PhiBor);
 16) Maktaba Zāhiriyya (now: Maktabat al-Asad al-Waṭaniyya, Asad National Library), 698/م (PhiBor);

Dublin (2 mss.):

- 17) *Chester Beatty Library, Ar. 3983 (vols. i-ii) (1 Rabī’ I 1002H/25 November 1593) (+ m, i) (PhiBor);
 18) ***Chester Beatty Library, Ar. 5412** (Ġumādā II 885H/August-September 1480; copyist: ‘Alī b. Faṭḥ Allāh al-Ma’dānī al-Šābirī; owner: Sulṭān Muḥammad b. Murād) (+ i) (PhiBor);

Herat (Afghanistan) (1 ms.):

- 19) Herat Museum Library, no number (13 Rabī’ II 898H/10 February 1493; copyist: Muḥammad Ibn Aḥmad al-Ḥayrī al-Anṣārī) (+ m, r, i) (PhiBor);

Hyderabad (4 mss.):

- 20) Salar Jung Museum Library, 78 (Ah);
- 21) *Osmaniya University Library, acq. 696 (PhiBor);
- 22) Osmaniya University Library, 14 (1001H/1592-3) (+ i) (PhiBor);
- 23) Osmaniya University Library, 217 (PhiBor);

Isfahan (3 mss.):

- 24) Maktabat al-Zahrā', 86 (+ i) (PhiBor);
- 25) *Mahdawi, Muslah al-din S. 1284 = 85 (ṭ incomplete: ṭ_i-vii) (PhiBor);
- 26) *Kitābhānah-i Markazī-yi Asnād Dānišgāh-i Iṣfahān, 151 (PhiBor);

Istanbul (29 mss.):

- 27) *Atıf Efendi Kütüphanesi, 1597 (ṭ incomplete: ṭ_i-vii) (*Liste*, M);
- 28) *Beyazıt Kütüphanesi, 'Umūmī 3966 (+ m, r, i; ṭ incomplete: ṭ_vi_I,1-IV,4, p. 201,13; V,7, p. 258,15-V,8) (PhiBor);
- 29) Türk İslam Eserleri Müzesi (Turkish Museum of Islamic Arts), Çoban Mustafa Paşa Kütüphanesi 572 (*Liste*, M, PhiBor);
- 30) ***Millet Kütüphanesi (now: Millet Yazma Eser Kütüphanesi)**, Feyzullah Efendi 1208 (1093H/1682; ṭ incomplete: ṭ_v-vii_I,6 + vi_IV,3) (*Liste*, M);
- 31) ***Köprülü Kütüphanesi, Fazıl Ahmet Paşa 894** (before 886H/1481; owner: Abū l-Faṭḥ Sulṭān Muḥammad Ḥān Gāzī [= Mehmet II, reg. 1444-6; 1451-81]) (+ m, r, i) (*Liste*, M, PhiBor);
- 32) *Nuruosmaniye Kütüphanesi, 2708 (X/XVI) (+ m, a fragment of r, i) (*Liste*, M, PhiBor);
- 33) *Nuruosmaniye Kütüphanesi, 2709 (886-97H/1481-92) (+ m, r, i) (*Liste*, M, PhiBor);
- 34) *Nuruosmaniye Kütüphanesi, 2710 (25 Rabī' I-25 Şawwāl 666H/21 December 1267-15 July 1268; copyist: 'Abd al-Kāfī Ibn 'Abd al-Mağīd Ibn 'Abd Allāh al-Tabrizī) (+ m, r, i) (*Liste*, M, PhiBor);
- 35) ***Nuruosmaniye Kütüphanesi, 2711** (XI/XVII) (+ i) (*Liste*, M, PhiBor);
- 36) ***Süleymaniye Kütüphanesi, Ayasofya 2441** (VII/XIII) (ṭ incomplete: ṭ_i-vi_V,6, p. 241, 6 [ed. Rahman]) (*Liste*, M);
- 37) *Süleymaniye Kütüphanesi, Ayasofya 2442 (671-4H/1272-6; copyist: Amīr al-Dīn Māniyūl [pro: Manuwīl?]; owners: Amīr al-Dīn Māniyūl; Buḥatnaşar Ibn Şim'ūn (Syr.: Nebukadnāzar Ben Şem'ūn), the Physician, from Qal'at al-Rūm [= Rumkale, nowadays Hromgla, South East Turkey]; Maḥmūd Ibn 'Alī Ibn Naşr Allāh al-Amī[n]; Sultan Maḥmūd I [reg. 1730-1745AD]; places of copy: Marāğa, Iran [671H]; Ḥarbart [= Ḥarbūt, nowadays Elazığ], East Turkey [674H]) (+ m, r, i) (*Liste*, M, PhiBor);
- 38) *Süleymaniye Kütüphanesi, Carullah 1332 (882H/1477-8; copyist: 'Alī Ibn Muḥammad) (+ i) (*Liste*, M, PhiBor);
- 39) *Süleymaniye Kütüphanesi, Carullah 1333 (+ i; ṭ incomplete: ṭ_v-vii) (*Liste*, M, PhiBor);
- 40) *Süleymaniye Kütüphanesi, Carullah 1424 (693H/1293-4; copyist: Abū Bakr 'Abd Allāh Ibn Aḥmad Ibn 'Abd Allāh al-Nassāḥ al-Tabrizī) (+ m, r, i) (*Liste*, M, PhiBor);
- 41) ***Süleymaniye Kütüphanesi, Damat İbrahim Paşa 822** (before 886H/1481; owner: Abū l-Faṭḥ Sulṭān Muḥammad Ḥān Gāzī [= Mehmet II, reg. 1444-6; 1451-81]) (+ m, r, i) (*Liste*, M, PhiBor) (**An, Ra**);

- 42) *Süleymaniye Kütüphanesi, Damat İbrahim Paşa 823 (697H/1297-8; copyist: Şahāb al-Karmīnī; place of copy: Tabrīz, Madrasat Ūrḥān) (+ m, r, i) (*Liste*, M, PhiBor);
- 43) *Süleymaniye Kütüphanesi, Damat İbrahim Paşa 825 (A: 655H/1257-8; *Liste*: 837-8H/1433-5; M: 650H/1252-3) (A with asterisk, *Liste*, M);
- 44) Süleymaniye Kütüphanesi, Eyüp Câmîi Hz. Hâlid 883 (*Liste*, PhiBor);
- 45) *Süleymaniye Kütüphanesi, Hamidiye 795 (Thursday 16 Rağab 1066H/10 May 1656; copyist: İbn Muḥammad Ḥusayn Muḥammad Şâdiq al-Tabrîzî) (+ m, i) (*Liste*, M, PhiBor);
- 46) *Süleymaniye Kütüphanesi, Hamidiye 796 (M);
- 47) *Süleymaniye Kütüphanesi, Hâlet Efendi 514 (X-XI/XVI-XVII) (*Liste*, M);
- 48) *Süleymaniye Kütüphanesi, Hekimoğlu Ali Paşa 857 (23 Ramaḍān 1102H/20 June 1691) (+ m, r, i) (*Liste*, M, PhiBor);
- 49) *Süleymaniye Kütüphanesi, Ragıp Paşa 866 (*Liste*, M);
- 50) *Turkey, Istanbul, Süleymaniye Kütüphanesi, Ragıp Paşa (ex: Ragıp Paşa Kütüphanesi) 910 (+ m, i, r) (PhiBor);
- 51) *Süleymaniye Kütüphanesi, Şehid Ali Paşa 1748 (27 Rağab 879H/16 December 1474) (+ m, i) (*Liste*, M, PhiBor);
- 52) *Süleymaniye Kütüphanesi, Yeni Câmî 770 (18 Rabî' II 888H/4 June 1483) (+ m, r, i) (*Liste*, M, PhiBor);
- 53) *Süleymaniye Kütüphanesi, Yeni Câmî 771 (885H/1480-1) (+ m) (*Liste*, M);
- 54) *Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3262 (IX/XV) (+ m, r, i) (*Liste*, M, PhiBor);
- 55) *Topkapı Sarayı Müzesi Kütüphanesi, Ahmet III 3263 (IX/XV) (+ r, i) (*Liste*, M, PhiBor);

Kabul (Afghanistan) (1 ms.):

- 56) *Arşif-i Millî Afgānistān, Afghan National Archive, 2295 (ex: Private Library of King Zaher Shah 4926) (apparently copied in X-XI/XVI-XVII from an exemplar whose copy started the year before 469H) (+ m_ii.IV-ix, r) (PhiBor);

Khūy (Khoy) (Iran) (2 mss.):

- 57) *Kitābhānah-i Madrasa-i Namāzī, 247 (Ramaḍān 986H/November-December 1578) (+ m, r, i) (PhiBor);
- 58) *Kitābhānah-i Madrasa-i Namāzī, 248 (VII/XIII,) (+ i, ṭ incomplete: ṭ_i_1,8, p. 43,16-viii) (PhiBor);

Kolkata (Calcutta, Bengal, India) (2 mss.):

- 59) Asiatic Society of Bengal Library, Ar. 102 (469H/1076-7; the date of copy probably refers not to this ms., apparently copied in XI/XVII c., but to its exemplar) (+ m, r, i) (Ah, PhiBor);
- 60) National Library of India, Buhar Collection, MS. 287 (1089H/1678-9; scribe: Abū l-Barakāt al-Rāzī) (Ah, M);

Lahore (Punjab, Pakistan) (1 ms.):

- 61) Punjab University Library, Ar. H II 2 (1213H/1798-9; scribe: Mīrzā Nāẓar 'Alī) (Ah);

Leiden (2 mss.):

- 62) *Universiteitsbibliotheek, Or. 4 (Golius Collection) (Catalogue CCO, n. 1444), (before X/XVI) (+ m, i) (*Liste*, M, PhiBor) (**An, Ra**);
 63) *Universiteitsbibliotheek, Or. 84 (Golius Collection) (Catalogue CCO, n. 1445) (8 Rabī' II 881H/9 August 1476; copyist: Faḍl Allāh Ibn 'Abd al-'Azīz Ḥāfiẓ) (+ m iii_II.5-end, r, i) (*Liste*, M, PhiBor) (**An, Ra**);

London (4 mss.):

- 64) *India Office (now: British Library, Oriental and India Office Collections), Ar. 1796 (n. 476 in Loth catalogue, p. 132) (1150H/1737-8) (*Liste*, M) (**An, Ba, Ra**);
 65) *British Museum (now: British Library, Oriental and India Office Collections), Or. 2873 (British Museum Suppl. 711) (1072H/1661-2) (*Liste*, Ah, M, PhiBor) (**An, Ba**);
 66) *British Museum (now: British Library, Oriental and India Office Collections), Or. 7500 (XI/XVII) (*Liste*, M, PhiBor) (**An**);
 67) *Royal Asiatic Society, Arabic 58 (Rabī' I 1082H/July-August 1671) (+ m, r, i) (PhiBor);

Lucknow (Uttar Pradesh, India) (2 mss.):

- 68) Naziriya Library, 65 (Daiber 1986, p. 37, no. 120) (PhiBor);
 69) Rajah of Mahmudabad Library, microfilm 76 (437H/1045-6?) (PhiBor);

Marāgha (Iran) (1 ms.):

- 70) Private Library of Y. B. Bābāpūr, 2 (PhiBor);

Mashhad (Iran) (11 mss.):

- 71) Kitābhānah-i Āstān-i Quds-i Razavī, catalogue, vol. IV,1, registration number: 872 (*Liste*, M);
 72) Kitābhānah-i Āstān-i Quds-i Razavī, catalogue, vol. IV,1, registration number: 873 (*Liste*, M);
 73) Kitābhānah-i Āstān-i Quds-i Razavī, catalogue, vol. IV,1, registration number: 874 (*Liste*, M);
 74) Kitābhānah-i Āstān-i Quds-i Razavī, catalogue, vol. IV,1, registration number: 875 (*Liste*, M);
 75) *Kitābhānah-i Āstān-i Quds-i Razavī, 13963 (995H/1586-7) (+ i) (*Liste*);
 76) *Kitābhānah-i Āstān-i Quds-i Razavī, 27166 (PhiBor);
 77) *Kitābhānah-i Āstān-i Quds-i Razavī, 770 (PhiBor);
 78) *Kitābhānah-i Āstān-i Quds-i Razavī, 771 (ṭ incomplete: ṭ_i-vi_III.6) (PhiBor);
 79) *Kitābhānah-i Āstān-i Quds-i Razavī, 7787 (PhiBor);
 80) *Kitābhānah-i Āstān-i Quds-i Razavī, 9045 (+ r) (PhiBor);
 81) *Kitābhānah-i Āstān-i Quds-i Razavī, 22582 (PhiBor);

Mosul (Iraq) (2 mss.):

82) University Library, 189.16 (+ m, r, i) (PhiBor);

83) Madrasat al-Mullā Zakar, 16 (678H/1279-80) (m, r, i) (PhiBor);

Najaf (Iraq) (1 ms.):

84) ***Maktabat al-Imām Amīr al-Mu'minīn, 3070** (496H/1102-3) (+ i, † incomplete: †_vi.III.8, p. 139, 20-vii) (PhiBor);

New Delhi (1 ms.):

85) Hamdard Library, 715 (PhiBor);

Oxford (3 mss.):

86) *Bodleian Library, Pococke 114 (Uri's catalogue I, 467) (603H/1206-7; fragmentary: 4v-29r = pp. 246-268 Bakoš's edition = V. 7-8) (*Liste*, M, PhiBor) (**An, Ba**);

87) *Bodleian Library, Pococke 116 (Uri's catalogue I, 471) (603H/1206-7; fragmentary: IV-V + 185v-256r = pp. 8-68 Bakoš's edition = half premise, I. 1-II. 2) (*Liste*, M, PhiBor) (**An, Ba, Ra**);

88) *Bodleian Library, Pococke 125 (Uri's catalogue I, 435) (Ğumādā I 561H/ March-April 1166 or 571H/November-December 1175; copyist: Muḥammad Ibn al-Ḥasan Ibn al-Ḥusayn [...]) (*Liste*, M, PhiBor) (**An, Ba, Ra**);

Patnā (capital city of Bihar state, India) (2 mss.):

89) Khudā Bakhsh Oriental Public Library (Bankipur), (Catalogue vol. XXI, 2225 (= Library's handlist 1905)) (X/XVI) (+ r, i; † incomplete: †_v-viii) (Ah, PhiBor);

90) Khudā Bakhsh Oriental Public Library (Bankipur), (Catalogue vol. XXI, 3465 (= Library's handlist 4286)) (m) (PhiBor);

Pešawar (Pakistan) (1 ms.):

91) Maktabat Dār al-'Ulūm al-Islāmiyya, 1672 (+ m, r, i) (*Liste*, Ah, PhiBor);

Princeton (1 ms.):

92) *Princeton University Library, 861 (972H/1564-5) († incomplete: †_vi-viii) (*Liste*, M);

Qum (Iran) (3 mss.):

93) Madrasa Fayḍiyya, 1428 (PhiBor);

94) *Markaz-i Iḥyā'-i Mirāt-i Islāmī, 3054 († incomplete: †_i-vi_III_3) (PhiBor);

95) *Kitābḥānah-i Mar'ašī, 18742 (12 Rağab 1022H/28 August 1613; copyist: Muḥammad Mu'min Ibn Ḥāğğī Muḥammad Kātib Iṣfahānī) (+ i) (PhiBor);

Rampur (India) (6 mss.):

96) *Rampur Raza Library, 3476ğ (*ḥikma* 112) (Catalogue 1902, vol. I, p. 397) (718H/1318-9; copyist: Maḥmūd Ibn 'Alī Ibn Muḥammad Ibn 'Alī Wandkilī; owners: Ṣadr al-Dīn Muḥammad Daštakī Širāzī, d. 903H/1498, his son Ğiyāṭ al-Dīn

Manşūr Daştakī Šīrāzī, d. 948H/1542, and this latter's son Šadr al-Dīn Muḥammad al-Ṭānī, d. 962H/1555; a student of Ġiyāṭ al-Dīn Manşūr, Faṭḥ Allāh al-Šīrāzī, d. 997H/1589, presumably brought the ms. to the court of the Mughal ruler Aqbar (reg. 1556-1605AD) in India, where it was lodged in the Mughal royal library and later transferred to Rampur) (+ m, i) (PhiBor);

- 97) *Rampur Raza Library, 3477Ḃ (Sunday, 6 Dū l-Ḥiġġa 468H/17 July 1076; the date of copy probably refers not to this ms., apparently copied in XII/XVIII c., but to its exemplar) (+ m, r, i) (PhiBor);
- 98) *Rampur Raza Library, 3478Ḃ (1267H/1850-1; copyist: Fadawī Kaḥīmkanan Wās) (+ m, i) (PhiBor);
- 99) Rampur Raza Library, 3481Ḃ (1293H/1876-7; copyist: by 'Izzat 'Alī Gorakhpūrī) (PhiBor);
- 100) Rampur Raza Library, 3486Ḃ (1293H/1876-7) (PhiBor);
- 101) Rampur Raza Library, 3487Ḃ (XIII/XIX) (PhiBor);

Tehran (27 mss.):

- 102) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 135 (Ša' bān 871H/March-April 1467; copyist: 'Alī Ibn Faṭḥ Allāh al-Ma' dānī al-Iṣfahānī) (+ m, i) (*Liste*, M, PhiBor);
- 103) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 5254 (897-8H/1491-3; copyist: Aḥmed Ibn 'Alī) (+ r_i-ii, iv, i) (PhiBor);
- 104) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 1894 (1097H/1685-6) (+ i) (PhiBor);
- 105) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 1897 (PhiBor);
- 106) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 1904 (ṭ incomplete: ṭ_i-vi) (PhiBor);
- 107) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 1905 (ṭ incomplete: ṭ_i-vii) (PhiBor);
- 108) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 18072 (PhiBor);
- 109) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, 3269 (PhiBor);
- 110) ***Kitābhānah-i Maġlis-i Shūrā-yi Millī (now: Kitābhānah-i Maġlis-i Shūrā-yi Islāmī = Parliament Library)**, Ṭabāṭabā'ī 865 (1029H/1619-20; copyist: 'Alī Ibn Ḥabīb Allāh Ṭāliqānī) (+ i) (*Liste*, M, PhiBor);
- 111) ***Kitābhānah-i Millī Malik, 1041** (*Liste*, M);
- 112) ***Kitābhānah-i Millī Malik, 1110** (*Liste*, M);
- 113) ***Kitābhānah-i Millī Malik, 1243** (880H/1475-6) (*Liste*, M);
- 114) ***Kitābhānah-i Millī Malik, 1275** (1116H/1704-5; copyist: Rafī' al-Dīn Muḥammad Ḥusayn al-Ṭabasī) (+ r_i-iii-iv_II, i) (*Liste*, M);
- 115) ***Kitābhānah-i Millī Malik, 2482** (*Liste*, M);

- 116) Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān (Central Library of Tehran University), Miškāt 241 Širāz, 1075H/1664-5; copyist: Muḥammad Šāliḥ al-Urdistānī) (+ m) (*Liste*, M);
- 117) *Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān (Central Library of Tehran University), Miškāt 243 (+ m, r, i) (*Liste*, M, PhiBor);
- 118) *Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān (Central Library of Tehran University), 2284 (PhiBor);
- 119) ***Kitābhānah-i Milli Ğumhūri-yi Islami-yi Iran (National Library), 1327 (X/XVI)** (+ r, i; ‡ incomplete: ‡ iii-viii) (PhiBor);
- 120) *Kitābhānah-i Milli Ğumhūri-yi Islami-yi Iran (National Library), 1757 (X/XVI) (+ i) (PhiBor);
- 121) Kitābhānah-i Milli Ğumhūri-yi Islami-yi Iran (National Library), 945-307, AS/590 (PhiBor);
- 122) Kitābhānah-i Milli Ğumhūri-yi Islami-yi Iran (National Library), 22608 (PhiBor);
- 123) *Kitābhānah-i Madrasah-i 'Ālī-i Sipahsālār (now: Kitābhānah-i Madrasah-i 'Ālī-i Shahīd Muṭahharī), 1438 (20 Muḥarram 1053H/10 April 1643; copyist: Muḥammad Muḥsin Ibn Muḥammad Ḥusayn Ḥātūnābādī) (+ m, r, i) (*Liste*, M, PhiBor);
- 124) *Kitābhānah-i Madrasah-i 'Ālī-i Sipahsālār (now: Kitābhānah-i Madrasah-i 'Ālī-i Shahīd Muṭahharī), 1439 (29 Rabī' I 1075H/20 October 1664; copyist: Zayn al-'Ābidīn Ibn Ḥāğğī Muḥammad Rāzānī) (+ m, r, i) (*Liste*, M, PhiBor);
- 125) *Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān (Central Library of Tehran University), 6596 (1076H/1665-6; copyist: Sulṭān Muḥammad Ibn Rafī' al-Dīn Muḥammad Iṣfahānī) (+ m, r_i-iii-iv-ii + i) (PhiBor);
- 126) *Kitābhānah-i Markazī-yi Dānišgāh-i Tihṛān (Central Library of Tehran University), 10582 (last decade of Ğumāda I 1076H/29 November-8 December 1665; copyist: Muḥammad Amīn Ibn Ḥaydar Na'īnī) (+ i) (PhiBor);
- 127) *Kitābhānah-i Madrasah-i 'Ālī-i Sipahsālār (now: Kitābhānah-i Madrasah-i 'Ālī-i Shahīd Muṭahharī), 8331 (1055H/1645-6; copyist: Faḍl Allāh Ibn Ḥusayn Nāyīnī) (+ m, r, i) (*Liste*, M, PhiBor);
- 128) ***Kitābhānah-i Dāniškāda-i Ilāhiyyāt-i Dānišgāh-i Tihṛān (Library of the Faculty of Theology of the University of Tehran), 204 (1257H/1841-2)** (PhiBor);

Tonk (India) (1 ms.):

- 129) Arabic and Persian Research Institute, 2133 (‡ incomplete: ‡_i-viii.XIX.1) (Ah, PhiBor);

Varanasi/Banaras/Benares (Uttar Pradesh, India) (1 ms.):

- 130) *Ğāmi'a Ğawādiyya, 11 (early X/XVI) (+ i) (PhiBor).

ABSTRACT

Al-Ġūzġānī's Insertion of On Cardiac Remedies in Avicenna's Book of the Soul: the Latin Translation as a Clue to his Editorial Activity on the Book of the Cure?

The aim of this article is to outline the textual and editorial vicissitudes of chapters 2-9 of Avicenna's medical treatise *On Cardiac Remedies* (*Maqāla fī l-adwiya al-qalbiyya*) that Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad al-Ġūzġānī (fl. XI c.), Avicenna's disciple and secretary, inserted between the end of the fourth treatise and the beginning of the fifth treatise of Avicenna's *Book of the Soul* (*Kitāb al-Nafs*). In particular, this article firstly aims at detecting the reason why al-Ġūzġānī inserted a selection from Avicenna's *On Cardiac Remedies* in this precise place of Avicenna's *Nafs*, and the related question of why al-Ġūzġānī inserted in this place only an excerpt of this treatise and not all of it. The reason seems to be that of providing the brief outline of Avicenna's theory of emotions in *Nafs*, IV, 4 with its medical background. Secondly, it provides a close scrutiny of the Arabic textual tradition of this insertion, which is by no means reflected in the current editions of the Arabic text of Avicenna's *Book of the Soul*. Lastly, this article offers an evaluation of the relevance of this insertion and, consequently, of the importance of studying it in relation to the textual tradition of both *On Cardiac Remedies* and the *Book of the Soul*.

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**Avicenna's *Liber de animalibus* ('Abbreviatio Avicennae').
Preliminaries and State of Affairs***

IBN SĪNĀ'S CONTRIBUTION TO THE TRANSMISSION OF ARISTOTLE'S ZOOLOGY IN THE ARAB WORLD

In the Greek transmission of Aristotle's (384-322 BC) zoological works, in most of the surviving twenty-six manuscripts, books one to nine of the *Historia animalium* have been passed down as a unit. Only one manuscript and eight copies of it also contain the tenth book, which was included in the Arabic translation in the ninth century¹. All nineteen books of the *Historia animalium* (1-10), *De partibus animalium* (11-14) and *De generatione animalium* (15-19) were translated into Arabic; only the two short intermediate treatises *De motu animalium* and *De incessu animalium* were unknown in the Arabic tradition. At the beginning of the thirteenth century, Michael Scot (ca 1170 - ca 1235/6) translated this Arabic translation into Latin during his residence in Toledo. About fifteen years later, during his stay in Italy, he recast into Latin Ibn Sīnā's abridged version and extensive adaptation of this text.

Abū 'Alī al-Ḥusayn ibn 'Abd Allāh ibn al-Ḥasan ibn 'Alī ibn Sīnā (Afšāna near Buḥārā ca 370/980 - Hamadān ca 428/1037), Ibn Sīnā (Avicenna)² for short, wrote his zoological work *Al-Ḥayawān* (*On Animals*) as the eighth, last and longest section of *Ṭabī'īyyāt* (*The Physics*), the second part of his large encyclopedia *Kitāb al-Šifā'* (*Book of Healing*), in which he discussed the philosophical and scientific achievements of the Greeks, in particular Aristotle. He probably produced it in 418/1027 on his journey to Šabūr-Ḥwāst in the company of 'Alā' al-Dawla³. In

* I am very grateful to Amos Bertolacci for his willingness to include this article in *Documenti e Studi*, and to Remke Kruk, to Charles Burnett and to the peer-reviewers for several corrections and useful remarks.

¹ D. M. BALME ed., A. GOTTHELF publ., *Aristotle, Historia animalium, Volume I: Books I-X: Text*, Cambridge 2002 (Cambridge Classical Texts and Commentaries 38), *Introduction*, pp. 6-9. F. BERGER, *Die Textgeschichte der Historia animalium des Aristoteles*, Dr. Ludwig Reichert Verlag, Wiesbaden 2005 (Serta Graeca Bd. 21).

² Ibn Sīnā was known in the Latin West under the name Avicenna, derived from the transliteration Avincenna via Hebrew Aven Sina (see V. COURTOIS S. J., *Avicenna Commemoration Volume*, Iran Society, Calcutta 1956, *Introduction* p. ix). The latter form is sometimes also found in Latin manuscripts, e.g. Vat. Chis. E. VIII. 251.

³ D. GUTAS, *Avicenna and the Aristotelian Tradition*, Brill, Leiden - Boston 2014², p. 108; R. KRUK, *Ibn Sīnā On Animals: Between the First Teacher and the Physician* in J. JANSSENS, D. DE SMET eds., *Avicenna and his Heritage*, Leuven University Press, Leuven 2002 (Ancient and Medieval Philosophy, Series 1), pp. 325-341.

doing so he used the knowledge that he had acquired via a ninth-century Arabic translation of Aristotle's zoological works, the *Kitāb al-Ḥayawān*, attributed to (pseudo-) Ibn al-Biṭrīq. That is to say, this translation is ascribed to Ibn al-Biṭrīq in Arabic sources, but modern scholars doubt whether this is correct⁴. Of the nineteen books transmitted in the Arabic tradition, Ibn Sīnā followed with a fair degree of accuracy the first ten books of the *Historia animalium*, the comparative and narrative part of Aristotle's zoology. As regards the contiguous parts, the treatise *De partibus animalium* that treats of the functions of the parts in a physiological and teleological way, and the treatise on reproduction, *De generatione animalium*, he left his own stamp on the text in many respects, using all kinds of information to modernize Aristotle's text and adapt it to the requirements of his own age. Moreover, the focus of attention shifted towards man as the subject of inquiry rather than the animal world, and this inquiry became more medical — and above all anatomical — than biological. The influence of Galen and Ibn Sīnā's own *Qānūn fī l-Ṭibb* is clearly present. Examples of this influence are Ibn Sīnā's attempts to combine Aristotle's theory of the heart as the origin of physical functions with the as of then accepted discoveries of the arteriovenous system, the nervous system and the function of the liver, and his efforts to combine Aristotle's theory of the soul and the role of male semen with the new discovery of the female ovaries and Galen's doctrine of the equal, but not identical, contribution of male and female seed in reproduction⁵. In the method that Ibn Sīnā uses to discuss Aristotle's zoology he mainly proceeds in three ways: he summarizes parts of Aristotle's text, he tries to achieve new syntheses between Aristotle's theories and more modern biological and medical insights and he substitutes considerable parts of Aristotle's text with more recent material, mainly drawn from Galen and the *Qānūn*⁶. He also adds material based on his own observations and third-party eyewitness reports.

⁴ See e.g. the *Introduction* of the editions of Brugman and Drossaart Lulofs 1971, pp. 1-3 and of Kruk 1979, p. 18ff. (note 7). Until now, the authorship of the translation has not been established with any certainty.

⁵ U. WEISSER, *Zeugung, Vererbung und pränatale Entwicklung in der Medizin des arabisch-islamischen Mittelalters*, Lüling, Erlangen 1983, pp. 308-309. EAD., *Die Harmonisierung antiker Zeugungstheorien im islamischen Kulturkreis und ihr Nachwirken im europäischen Mittelalter*, in A. ZIMMERMANN, I. CRAEMER-RUEGENBERG eds., *Orientalische Kultur und europäisches Mittelalter*, «Miscellanea Mediaevalia», 17, Walter de Gruyter, Berlin - New York 1985, pp. 301-327. Esp. p. 323.

⁶ *Al-Šifā', al-Ṭabī'īyyāt, VIII: al-Ḥayawān* edd. 'A. MUNTASIR, S. ZĀYID, 'A. ISMĀ'ĪL, I. MADKOUR, *Préface* pp. 11-20, *Al-Maṭba'a al-amīriyya*, Cairo 1970. B. F. MUSALLAM, *Avicenna, X. Biology and Medicine*, in «Encyclopaedia Iranica» (1987-), iranicaonline.org 2016.

THE LATIN TRANSLATION BY MICHAEL SCOT

In the thirteenth century there was available a Latin translation of Aristotle's *Libri de animalibus*, which had been produced by Michael Scot in the famous translation centre in Toledo, possibly around or even before 1215. Scot came from Scotland and, probably as a child or young man, had departed for Toledo in the last quarter of the twelfth century, receiving further training there. As we mentioned, Scot used for his translation the Arabic version of (pseudo-) Ibn al-Biṭrīq, which has been (partly) preserved in three manuscripts, with the individual parts having been edited⁷. Scot's Latin translation was widely disseminated — we still have 64 manuscripts from the thirteenth and fourteenth centuries, not including compendia, excerpts and fragments — and the text was certainly used up to the sixteenth century, despite the fact that William of Moerbeke had made a new, Greco-Latin translation in several stages from around 1260 onwards⁸. An extant Spanish inventory of books from 1338 shows that the autograph of Scot's translation was still in the possession of Cardinal-bishop Gudiel⁹. In Toledo Scot produced many translations of philosophical texts and commentaries from Arabic into Latin, possibly quite often assisted by other, mostly Jewish, scholars, the majority of whom remain shrouded in mystery. Of these texts, only his translation of al-Biṭrūḡī *On the Movements of the Heavens*, dedicated to the important Stephen of Provins, whose tasks included assessing the teaching material at the new universities, is dated: 18 August 1217 (made

⁷ ARISTOTLE, *History of Animals*, Arabic. *Ṭibā' al-ḥayawān. Tardjama: Yuḥannā Ibn al-Biṭrīq*, ed. 'A. BADAWĪ, Kuwait 1977. L. S. FILIUS ed., in *Aristoteles Semitico-Latinus* (Brill, forthcoming). ARISTOTLE, *Parts of Animals*, Arabic. *Adjzā' al-ḥayawān. Tardjama: Yuḥannā Ibn al-Biṭrīq*, ed. 'A. BADAWĪ, Kuwait 1978. R. KRUK ed., *The Arabic Version of Aristotle's Parts of Animals. Books XI-XIV of the Kitāb Al-Ḥayawān*, North-Holland Publishing Company, Amsterdam - Oxford 1979 (ASL 2). ARISTOTLE, *Generation of Animals*, Arabic. *Aristotle, Generation of Animals. The Arabic Translation Commonly Ascribed to Yahyā ibn al-Biṭrīq*, edd. J. BRUGMAN, H. J. DROSSAART LULOFS, Brill, Leiden 1971. The Arabic translation is preserved in three manuscripts: Leiden Or. 166 (G), London British Library Or. Add. 7511 (L) and Tehran Majles Library 1143 (T).

⁸ Scot's translation is being edited in the series *Aristoteles Semitico-Latinus* (Brill). *Aristotle, De animalibus. Michael Scot's Arabic-Latin Translation. Part three: Books XV-XIX, Generation of Animals*, ed. A. M. I. VAN OPPENRAAY, Brill, Leiden - New York - Köln 1992 (ASL 5.3). EAD., *Part two: Books XI-XIV, Parts of Animals*, Brill, Leiden - Boston - Köln 1998 (ASL 5.2.). EAD., *Part one: History of Animals*, (ASL 5.1 forthcoming). De Graeco-Latin translation by Willem van Moerbeke is being edited in the series *Aristoteles Latinus* (Brill). *De Historia Animalium, Translatio Guillelmi de Morbeka, Pars prima: Lib. I-V*, edd. P. BEULLENS, F. BOSSIER, Brill, Leiden - Boston - Köln 2000 (Aristoteles Latinus XVII 2.1.1.). *De Generatione Animalium, Translatio Guillelmi de Morbeka*, ed. H. J. DROSSAART LULOFS, Desclée de Brouwer, Bruges - Paris 1966 (Aristoteles Latinus XVII 2.V). *De partibus animalium* (XVII.1-2.IV) will be edited by Pietro Rossi.

⁹ M. ALONSO ALONSO, *Bibliotecas medievales de los Arzobispos de Toledo*, «Razón y Fé», 123, 1941, pp. 295-309.

«cum Abuteo levite»). Scot is credited with Aristotle's *Physica* and *De animalibus*, Averroes' commentaries on the *Physica*, *Metaphysica*, *De anima*, *De caelo et mundo*, *De generatione et corruptione* and *Meteora*, Avicenna's *De animalibus*, al-Bitrūḡī *De motibus caelorum* and many other larger and smaller works of which his authorship is often uncertain or which are certainly misattributed to him¹⁰. «Almost all information about his life and work is uncertain ... Although imaginative scholars have established undocumented traditions, no satisfactory analysis — linguistic, stylistic, or doctrinal — of writings ascribed to him has been carried out. It is thus impossible to determine the accuracy of many attributions» (Lorenzo Minio-Paluello in *Dictionary of Scientific Biography* 1974)¹¹. For all the recent studies of Scot's work and translation method¹², not much progress has been made in this regard. Editing and studying his work is very time-consuming and it is difficult to find editors and funding. The wise words of Marie-Thérèse d'Alverny still apply: «nous craignons qu' il ne faille attendre la publication de plusieurs éditions munies d' index bilingues pour nous orienter sans trop de risques»¹³.

THE LATIN MANUSCRIPT TRADITION

In 1215-6, in the retinue of Archbishop Rodrigo of Toledo, Master Michael Scot attended the fourth Lateran Council, in which the primacy of the archbishopric of Toledo was confirmed, Frederick II of Hohenstaufen was recognized as emperor, many decisions on canon law were taken and the bestowal of benefices was regulated. Around 1220 and in the following years until his probable death

¹⁰ For instance, Dag Hasse questions his authorship of the *Meteora* commentary. See note 11.

¹¹ Dag Hasse is an exception, largely due to his editing of the *Metaphysics* commentary. See D. N. HASSE, A. BERTOLACCI, *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, De Gruyter, Berlin - Boston 2012.

¹² I.a. F. J. CARMODY, *The Latin Style of Michael Scot in De celo*, in W. D. HAND, G. O. ARLT, J. J. AUGUSTIN eds., *Humaniora. Essays in Literature - Folklore - Bibliography, Honoring Archer Taylor on his Seventieth Birthday*, Locust Valley, New York 1960, pp. 208-218. A. M. I. VAN OPPENRAAY, *Quelques particularités de la méthode de traduction de Michel Scot*, in J. HAMESSE, M. FATTORI eds., *Rencontres de cultures dans la philosophie médiévale*, Université Catholique de Louvain, Louvain-la-Neuve - Cassino 1990, pp. 121-129. D. N. HASSE, *Latin Averroes Translations of the First Half of the Thirteenth Century*, Georg Olms Verlag, Hildesheim - Zürich - New York 2010.

¹³ M.-T. D'ALVERNY, *Les traductions d' Avicenne. Quelques résultats d' une enquête*, in *Actes du V^e Congrès International des Arabisants (Bruxelles 1970)*, Publications du Centre pour l'Étude des Problèmes du Monde Musulman Contemporain, Bruxelles 1971 (Correspondance d'Orient, 11), pp. 151-158 (158). Mlle d'Alverny has done lion's work in furthering our knowledge of the reception of Avicenna's work in the West. An anthology of her work is offered in *Avicenne en Occident. Recueil d'articles de Marie-Thérèse d'Alverny*, Librairie J. Vrin, Paris 1993 (Études de Philosophie Médiévale LXXI). Furthermore there is *An Annotated Bibliography on Ibn Sīnā (1970-1989)* by J. L. JANSSENS, University Press, Leuven 1991; Id., *First Supplement (1990-1994)*, FIDEM, Louvain-la-Neuve 1999 (Textes et Études du Moyen Âge 12).

in 1235/6, Scot's life unfolds mainly in central and southern Italy and Sicily. Among other places, he stays in Bologna, where in 1220 he writes a celebrated gynaecological report on a case of a calcified fibroid tumor in his practice. It has survived in the margin of three Latin manuscripts of his translation of *De generatione animalium* as an annotation at the appropriate place, the discussion of the *mola uteri*¹⁴. He had been ordained as a priest and uses the title Magister, enters the service of the papal Curia (1224-1227) and received benefices in England and Scotland on the recommendation of both Pope Honorius III and Pope Gregory IX. In this period he also frequented the court of Emperor Frederick II Hohenstaufen, who was deeply interested in anything to do with science and knowledge of nature and most certainly also in the Aristotelian treatise on zoology. For his day and age he possessed a large and famous zoo, was of course a passionate and proficient hunter and had great, above all practical, knowledge of birds of prey, by his own account even greater than that of Aristotle. Scot is noted as a scholar, translator, philosopher, physician, astrologer and later also as necromancer and magus. In this period he writes his most famous own works, including the *Liber introductorius*, dealing with many learned subjects and dedicated to Emperor Frederick, the *Liber particularis*, a supplementary work for advanced readers, concluding with a report of Scot's answers to interesting questions from the emperor about all kinds of intellectual subjects, and the *Liber fisionomie*, on the human body and its influence on mind and character, as well as various works on alchemy and astrology. We know that meanwhile he was also involved in the organization of the curricula of the first universities and introduced there works by Aristotle and commentaries by Ibn Rušd (Averroes) on these texts in Latin translation, in any case in Italy, but also in Paris and Oxford and probably in other centres as well. It was probably at the emperor's request that Scot translated Ibn Sīnā's *Liber de animalibus* (*Kitāb al-Ḥayawān*), also referred to as *Abbreviatio Avicennae*, perhaps with the help of somebody like Jacob Anatolio, who worked together with Scot in Naples around 1230¹⁵. In any case this translation was dedicated by Scot to Emperor Frederick. To this day thirty-three Latin manuscripts from the late thirteenth and early fourteenth century, mainly from Italy and Northern Europe, have been attested, of which twenty-eight were described in George Lacombe's *Aristoteles Latinus* catalogue and four other manuscripts as well in Marie-Thérèse d'Alverny's *Avicenna*

¹⁴ *De Generatione animalium*, 4, 775b25-776a13. Cf. VAN OPPENRAAY ed., GA, ASL 5 cit., pp. 244-246); Y. V. O'NEILL, *Michael Scot and Mary of Bologna. A Medieval Gynecological Puzzle*, «Clio Medica», 8/2, Hoeber, Amsterdam 1973, pp. 87-111, with *An Addendum* in «Clio Medica», 9/2, Hoeber, Amsterdam 1974, pp. 125-129.

¹⁵ C. BURNETT, *Michael Scot and the Transmission of Scientific Culture*, «Micrologus», 2, 1994, pp. 101-126, p. 111.

Latinus Codices, edited by Simone van Riet and Pierre Jodogne in 1994¹⁶. Five of these are fragmentary, while the others contain the whole text. Manuscript collections often incorporate Avicenna's work together with texts by Aristotle and Averroes. Hence the frequent overlap between large manuscript catalogues like those of Lacombe and d'Alverny. In her 1971 article *Les Traductions d'Avicenne* Marie-Thérèse d'Alverny distinguishes five categories of manuscript collections with translations of Avicenna. (1) There is a group of manuscripts produced in Toledo at the end of the twelfth century; it is a colourful hotch-potch of works, including Avicenna's *Kitāb al-Šifā'*, by well-known and anonymous translators and learned authors from this period. By the beginning of the thirteenth century these collections had become consolidated and much used. Some new collections of translations are disseminated by travelling scholars. (2) Towards the mid-thirteenth century many new combinations are formed, for instance thirteenth-century translations of Averroes are added to the existing twelfth-century collections. Michael Scot made a considerable contribution in this phase of the manuscript transmission, both in Toledo and in Italy. The collections formed in this period are externally plain, but their contents are crucial to the history of the spread of translations of Aristotle and Averroes and of chiefly Arabic philosophers (the so-called *corpus vetustius*)¹⁷. The number of manuscripts of Avicenna's texts increases explosively in the second half of the thirteenth century, and they are found either mixed with earlier collections or purposely combined with Aristotle's principal treatises. The surviving catalogue of Cardinal-bishop Garcia de Gudiel from 1338¹⁸ offers a detailed picture of the wealth of manuscripts extant in the collection of prominent people in those days. (3) Special collections with Avicenna's work were formed in particular by the widely travelling Mendicants, Dominicans and Franciscans¹⁹. (4) In the late thirteenth and early fourteenth century we see the development of mixed collections of Avicenna's work with scientific writings and works by learned

¹⁶ *Aristoteles Latinus, codices descripsit G. Lacombe et al., Pars prior*, La Libreria dello Stato, Roma 1939, *Pars posterior*, Cambridge University Press, Cambridge 1955, *Supplementa altera* ed. L. MINIO-PALUELLO, Desclée de Brouwer, Bruges - Paris 1961. S. VAN RIET, P. JODOGNE, *Avicenna Latinus Codices, descripsit Marie-Thérèse d'Alverny*, Peeters - Brill, Louvain-la-Neuve - Leiden 1994.

¹⁷ C. BURNETT, *The Arabo-Latin Aristotle* in A. M. I. VAN OPPENRAAY ed. with the collaboration of R. FONTAINE, *The Letter before the Spirit: The Importance of Text Editions for the Study of the Reception of Aristotle*, Brill, Leiden - Boston 2012 (ASL 22), pp. 95-105.

¹⁸ See note 9.

¹⁹ This environment produced for instance the three Latin manuscripts containing both Scot's translation of Aristotle's zoological works and that of Avicenna: Vat. Chisianus E. VIII. 251 olim Sacri Conventus S. Francisci Assisiensis cod. CLXIV; Brugensis Bibl. Seminarii Maioris 99/112 olim monasterii S. Mariae de Dunis; Florentinus Laurent. S. Crucis Plut. XIII sin. cod. 9 olim conventus Sanctae Crucis n. 545.

masters like Albertus Magnus or Thomas Aquinas. (5) From the second half of the fourteenth century Avicenna's writings play a major role particularly in medical collections in Italy, obviously owing to Gerard of Cremona's Latin translation of his *Qānūn*, although his *Šifā'* also remains of great importance.

Besides the studies of Lacombe, d'Alverny and others, some valuable codicological work on the Latin text in the Vatican manuscript Chigi E. VIII. 251 has been done by Erik Kwakkel at Leiden University and previously at the University of Victoria in Canada. In an article for *Viator* in 2009, for instance, he analyzed three unusual correction techniques encountered in the Avicennian text: the use of a struck-out *d* to flag a mistake; the replacement of a quire containing faulty text with one containing an improved reading; and the filling in of lacunae left behind during the copying of the main text²⁰. This oldest surviving Latin manuscript, which holds both Scot's translation of Aristotle's zoological text and that of Avicenna (see note 16), also attests to Scot's connection with the emperor and his court: this is borne out by two identical personal dedications and a concluding eulogistic hexameter in the four principal languages of Frederick's empire²¹. The codex once formed part of the library of the Sacro Convento in Assisi (no. CLXIV in the 1381 inventory); we know that brother Elias was on friendly terms with Michael Scot and a supporter of Frederick II²². In 1232 Master Henricus of Cologne made a copy of this text, kindly made available by the emperor, in the house of his court physician Master Volmar in Melfi. Emperor Frederick himself also showed his credentials in the field of zoology: in later years he completed his treatise on birds and falconry *De arte venandi cum avibus*, thus fulfilling a long-cherished wish. The influence of Scot's translation of Aristotle's treatise on *De arte venandi* is demonstrable, but the possible influence of his translation of Avicenna's *Abbreviatio* has not yet been studied in detail²³. Both within Aristotle's oeuvre and within Avicenna's *Šifā'* the nineteen zoological books take up by far the most space, indicating the importance that both philosopher-scholars attached to the subject.

²⁰ E. KWAKKEL, *Behind the Scenes of a Revision: Michael Scot and the Oldest Manuscript of his Abbreviatio Avicenne*, « *Viator* », 40/1, 2009, pp. 107-132.

²¹ M.-T. D'ALVERNY, *L'Explicit du « De animalibus » d'Avicenne traduit par Michel Scot*, « *Bibliothèque de l'École des Chartes* », 115, 1957, pp. 32-42. KWAKKEL, *Behind the Scenes* cit. E. KWAKKEL, A. M. I. VAN OPPENRAAY, *Introduction*, in *Aristotle, De animalibus. Part one, History of Animals* (ASL 5.1 forthcoming).

²² D'ALVERNY, *L'Explicit du « De animalibus »* cit., p. 34.

²³ B. VAN DEN ABEELE, *Inspirations orientales et destinées occidentales du 'De arte venandi cum avibus' de Frédéric II, in Federico II e le nuove culture*. Atti del XXXI Convegno storico internazionale, Todi 1994, Fondazione CISAM, Spoleto 1995, pp. 363-391. A. PAULUS, B. VAN DEN ABEELE, *Frédéric II de Hohenstaufen, « L'art de chasser avec les oiseaux ». Le traité de fauconnerie 'De arte venandi cum avibus' traduit, introduit et annoté*, J. Laget, Nogent-le-Roi 2000 (*Bibliotheca Cynegetica* 1), p. 30 n. 132.

THE LATER HISTORY OF THE TEXT

Apart from Michael Scot, no one has ever translated Ibn Sīnā's *Liber animalium* into another contemporary or modern language²⁴. But it may be that one or more compendia of the text circulated. The clusters of quotations from Ibn Sīnā's *Ḥayawān* occurring in other works, like Marwazī's *Kitāb Ṭabā'ī 'al-Ḥayawān*, could point in this direction²⁵. As Scot's translation appears to render an abridged version of the text, the *Abbreviatio Avicennae* may be a Latin translation of an Arabic compendium of the text. This will have to be further investigated during work on the edition of the translation. Scot's translation style is essentially as literal as possible, though he does regularly shorten the often elaborate Arabic paraphrases of the Greek text. However, it is unlikely that he independently omitted entire sections, as quite often seems to be the case in his translation of Avicenna's text. In general, he aims to give the reader a clear Latin text and a good understanding of its contents. Sometimes, he therefore forgoes a literal translation and liberally renders the text on the basis of its content. Although scholars have conducted some research into Michael Scot's translation method and his own works (among others, Francis Carmody, Dag Hasse and Aafke van Oppenraay)²⁶, there is need for a systematic inquiry, preferably of course by means of critical editions of his translations and his own writings. Another desideratum is a translation of the Arabic text of his *Ḥayawān* into a modern language like English, French, German, Spanish or Italian, the more so because it is rather lengthy. As regards scientific commentaries on the text, the sole example we know of is Albertus Magnus' great commentary on Aristotle's zoology, in which he incorporated Scot's Latin translations of both Aristotle's and Avicenna's text, since Scot had also translated Aristotle's work from Arabic into Latin. Albertus' commentary was published in 1916 by Hermann Stadler, who tried to provide a meticulous and also optical demarcation of the passages from Scot's translations of both works as well as of Albertus' own text and his quotations drawn from elsewhere²⁷. Albertus' work on animals was ultimately

²⁴ H. DAIBER, *Bibliography of Islamic Philosophy*. Ibn Sīnā, Brill, Leiden - Boston 2011, vol. I, p. 474.

²⁵ R. KRUK, 'On Animals': *Excerpts of Aristotle and Ibn Sīnā in Marwazī's 'Ṭabā'ī 'al-Ḥayawān'* in C. STEEL ET AL. eds., *Aristotle's Animals in the Middle Ages and Renaissance*, Leuven University Press, Leuven 1999, pp. 96-125.

²⁶ See note 12. For Scotus' *Liber introductorius* (*Liber quatuor distinctionum*, *Liber particularis*, *Liber phisyonomie*) see i.a. BURNETT, *Michael Scot and the Transmission of Scientific Culture* cit.

²⁷ Albertus Magnus, *De animalibus libri XXVI*, ed. H. STADLER, in *Beiträge zur Geschichte der Philosophie des Mittelalters*, 15-16, Aschendorffsche Verlagsbuchhandlung, Münster 1916-1920. K. F. KITCHELL, I. M. RESNICK tr., *Albertus Magnus, On Animals: A Medieval Summa Zoologica*, 2 vols., The Johns Hopkins University Press, Baltimore - London 1999. A. TAKAHASHI, *Nature, Formative Power and Intellect in the Natural Philosophy of Albert the Great*, « Early Science and Medicine », 13/5, 2008, pp. 451-481.

printed six times, in Rome (1478), in Mantua (1479) and four times in Venice (1490-1519). Via this commentary of Albertus the zoological texts of Aristotle and Avicenna were disseminated and became widely known, particularly among the Mendicants. The rich *Nachleben* of the texts in the Middle Ages and the Renaissance has been extensively studied in the literature. Ample information on this can be found in for instance the detailed and richly documented article *Le 'De animalibus' d'Aristote dans le monde latin: modalités de sa réception médiévale* by Baudouin van den Abeele²⁸. In the Renaissance the translation by Theodorus Gaza, printed from 1476, made a great impact²⁹.

In what is called the 'Syrian Renaissance' of the twelfth and thirteenth centuries many scientific achievements of the Islamic Arab-speaking world are incorporated into the Christian Syrian community. Especially interesting here is the reception history of Ibn Sīnā's writings in the Syriac-speaking world, particularly that of the *Šifā'*³⁰. The most important representative here is Barhebraeus (Abū l-Faraǧ Grigorios Bar 'Ebrāyā, 1225/6-1286), who assumed the role of commentator, translator and compiler of Ibn Sīnā's work within his own writings (in particular *Discourse of Wisdom*, *Cream of Wisdom*, *Candelabrum*). He is also significant as a textual witness because certain Arabic readings of Ibn Sīnā can be corrected or indeed confirmed by means of the Syriac texts, just as in the case of a medieval Latin version. Moreover, he was an intermediary for the transmission of Ibn Sīnā's body of thought within the community of Syrian Christians (West Syrians, East Syrians, Maronites) and Arab-speaking Copts. In many respects Barhebraeus' voluminous encyclopedia *Cream of Wisdom* (*Butyrum sapientiae*) is modelled on Ibn Sīnā's *Šifā'*. Regrettably, no further research has yet been done into the part on zoology, although some parts of the *Butyrum* have been published in the *Aristoteles Semitico-Latinus* series (see note 38). It will undoubtedly be interesting to be able to compare the Aristotelian treatises of Ibn Sīnā and of Barhebraeus in due course.

Ibn Sīnā's Arabic text was published by a team of scholars under the direction of Ibrahim Madkour in 1970, under the title *Al-Šifā', La Physique VIII^e - Les Animaux (Fī Ṭabā' i ' al-Ḥayawān)*³¹. The introduction contains an extensive table

²⁸ B. VAN DEN ABELE, *Le 'De animalibus' d'Aristote dans le monde latin: modalités de sa réception médiévale*, « Frühmittelalterliche Studien », 33, 1999, pp. 287-318. A. M. I. VAN OPPENRAAY, *Michael Scot's Translation of Aristotle's 'Books on Animals' and the Pleasure of Knowledge*, « Quaestio », 15 (*The Pleasure of Knowledge/Il piacere della conoscenza*, P. PORRO, L. STURLESE eds.), 2015, pp. 145-154.

²⁹ P. BEULLENS, A. GOTTHELF, *Theodore Gaza's Translation of Aristotle's 'De Animalibus': Content, Influence, and Date*, « Greek, Roman and Byzantine Studies », 47, 2007, pp. 469-513.

³⁰ H. TAKAHASHI, *The Reception of Ibn Sīnā in Syriac. The Case of Gregory Barhebraeus in D. C. REISMAN ed. with the assistance of A. H. AL-RAHIM, Before and after Avicenna. Proceedings of the First Conference of the Avicenna Study Group*, « IPTS », 52, 2003, pp. 249-281.

³¹ See note 6.

of contents of the work and a comprehensive discussion of the treatise, with chapters on Aristotle as biologist and on the Arabic translation and its influence on Arabic literature³², on Ibn Sīnā and his views and interests with regard to biology and the work of his illustrious predecessor, and on the composition of his treatise in four parts: comparative zoology, anatomy, physiology, and reproduction and embryology. Dr. Madkour stresses the originality of Ibn Sīnā's work and of the way he utilizes his, mainly medical, sources, including his own *Qānūn*. The editors have made no attempt to correct the many corrupted animal names in the Arabic text on the basis of the Greek text of Aristotle's zoological works, as 'Abdurrahmān Badawī has done for the edition of the Arabic translation of the Aristotelian text³³. Particularly in relation to lexis and translation technique there is still much research to be conducted, both on Ibn Sīnā's text and on Michael Scot's translation of it.

Michael Scot's Latin translation of Ibn Sīnā's biology was printed twice under different titles, *Avicenne Liber De animalibus* and *Avicenne Liber De natura animalium*, both times in Venice: (1) Avicenna, *De Animalibus*, per magistrum Michaellem Scotum de arabico in latinum translatus, Venetiis, per Joh. et Gregorium de Gregoriis (ca 1500), GW III (1928) no. 3112. And (2) *Avicenne perhypatetici philosophi ... per canonicos emendate ... De Animalibus (De natura animalium)*, ff. 29-64, Venetiis, ... per Bonetum Locatellum Bergomensem presbyterum ... 1508. The different titles are mainly used above the columns of text, sometimes interchangeably. The results of the first findings of my study of the Latin text were published in *Michael Scot's Latin Translation of Avicenna's Treatise on Animals: Some Preliminary Remarks on the Future Edition*³⁴. In the article, I describe a special branch of manuscripts from Venice. These manuscripts contain four passages, comprising approximately two printed columns, which appear to have fallen victim to an accidental re-ordering, probably because the correct order of the gatherings was compromised during copying of the text at the scriptorium. This discrepancy becomes apparent if one compares the Venice manuscripts to the original Arabic text and the text in the other Latin manuscripts. Unfortunately, manuscripts from this faulty branch were used for both early editions of Avicenna's text. The restored order of the passages in question can be found at the end of the article just mentioned. The title *Abbreviatio Avicenne* under which the treatise has also become known is derived from the way in which the work is sometimes referred to in the manuscripts, which provides an explanation

³² On this, see also the introductions in the editions of Brugman and Drossaart Lulofs (1971) and Kruk (1979) (see note 7).

³³ BADAWI, Aristotle, *History of Animals*, Arabic cit.

³⁴ R. BEYERS, J. BRAMS ET AL. eds., *Tradition et Traduction. Les Textes Philosophiques et Scientifiques Grecs au Moyen Age Latin. Hommage à Fernand Bossier*, Leuven University Press, Leuven 1999, pp.107-114.

for the variations at the beginning of the text in the manuscript from Bruges 161: *Incipit abbreviatio avicenne libri animalium* and in Pommersfelden 159: *Incipit abbreviatio avicenne super librum animalium aristotilis*³⁵.

The committee of the *Aristoteles Latinus* decided from the outset that an edition of Michael Scot's Latin translation of Ibn Sīnā's *Liber de animalibus* should be included in the *Corpus Philosophorum Medii Aevi*³⁶. The treatise forms part of the edition of the *Kitāb al-Šifā'* and belongs in the *Avicenna Latinus* series founded by Simone van Riet³⁷. However, because of the expertise present in the sister project *Aristoteles Semitico-Latinus* concerning the zoological treatises and the translator Michael Scot, the edition of this part was entrusted by Van Riet to the ASL and incorporated as a central volume in this series³⁸.

³⁵ Brugge, Bibliotheek van het Groot Seminarie 99/112; Pommersfelden, Schlossbibliothek 159.

³⁶ *Aristoteles Latinus, Pars prior, Praefatio: Libri de animalibus* cit., p. 81 n. 2.

³⁷ DAIBER, *Bibliography of Islamic Philosophy* cit.

³⁸ See brill.com/asl for a list of volumes.

APPENDIX

Avicenna's *Liber de animalibus*. The beginning of Michael Scot's Arabic-Latin translation transcribed from the oldest ms. Vaticanus Chigi E. VIII. 251 F. 109r. The reader may compare the text of the translation with the beginning of the Arabic text from the edition of Ibrāhīm Madkour et.al. of 1970. The abbreviating style of Scot and his focus on the content is already clearly visible in this first part of the translation³⁹.

Fen octava de summa naturarum et est in natura animalium.

Frederice Romanorum Imperator domine mundi. suscipe devote hunc laborem Michaelis Scoti. ut sit gratia capiti tuo. et torques collo tuo.

Incipit abreviatio Avincenne super librum animalium Aristotilis.

- 5 Et animalia quedam communicant in membris sicut equus et homo in nervo et in carne et quedam discrepant in membris consimilibus vel in habitudine membrorum. Et que discrepant in membro, discrepant in membro vel quia membrum est simplex vel compositum. Exemplum secundi est quia equus habet caudam et homo non, exemplum primi est quod testudo habet concas et irricius spinas et homo non et
10 pisces squamas.

- In habitudine autem aut quantitate aut qualitate aut situ aut actione aut passione. Quantitate ut os oculi nicticoracis magnum et os oculi aquile parvum, aut numero ut in araneis quarum pedes in aliquibus sunt octo in aliquibus sunt decem et quarundam sex. Qualitate colore et figura aut mollicie aut duricie. Diversitas in
15 situ ut in mamillis elephantis et eque et diversitas in actione ut in auribus elephantis cum quibus pugnat et suis naribus quibus accipit, diversitas in passione ut in oculis vespertilionis qui sunt debiles et esse oculi irundinis econtrario.

Partes vero animalis aut sunt humide ut sanguis pinguedo medulla aut sperma et humores, aut dure ut nervi vene ossa capilli et cartillagines et cornua.

- 20 Et quia sic diversantur animalia quod etiam quedam illorum sunt aquea et quedam agrestia. Et aquea sunt multis modis quia quedam in nutrimento et habitatione sunt aquea et quedam inspirant aquam et recipiunt in ventre et evomunt eam et non vivunt extra eam, et quedam sunt quorum habitatio et nutrimentum sunt aquea, verumtamen cum hoc inspirant aerem tantum et ita faciunt nutrita in
25 aqua sive ea que egrediuntur ab aqua sicut tortuca. Et quedam sunt tantum in aqua habitantia sicut quedam conche et halzun que non apparent aeri et non intrat aqua in ventres eorum nisi secundum viam adquirendi nutrimentum, non secundum viam inspirationis sed quod via inspirationis est ut inspiret, deinde evomet ipsam ad eventationem caloris naturalis ut expellat superfluum calidum. Et aquea que

³⁹ Arabic text cf. Madkour (1970), pp. 1. 3-4, 2.4 – 4.17, see note 6; Latin transcript by Aafke van Oppenraay from Ms. Vat. Chis. E. VIII. 251 F. 109r.

vivunt in aqua et non solum ex aqua licet illud animal quod vivit solum ex aqua non 30
habet locum nisi aquam.

Et quedam animalia sunt in pelago et quedam in stagno, quedam in mari, stagno
ut rane. Et quedam agrestia inspirant per os et nares et quedam non inspirant ita
sed per poros tantum, ut apes et musce et vespe et animalia anulosa. Et quedam
animalia sunt aquea et postea fiunt agrestia sicut grece medemeiezdez et vivit 35
in fluminibus, deinde alteratur ea forma et fit astaraz et egreditur ad agrum. Et
animalia aquea quedam que sunt undosa et quedam in ripa et quedam cenosa et
quedam manent in petris. Et animalia que semper sunt in uno loco sunt sicut species
concarum et quedam sunt libera corpore, ut multi pisces et quedam adherent
conchis in principio et post liberantur, ut querant melius nutrimentum, quando 40
non offert eis aqua nutrimentum sufficiens.

الفن الثامن من جملة الطبيعيات وهو في طبائع الحيوان

إن الحيوان قد يشترك في أعضاء، وقد يتباين بأعضاء. أما الشركة، فمثل اشتراك الإنسان والفرس في أن لهما لحما وعصبا وعظما، وإن كان المشترك فيه واحدا بالجنس لا بالنوع. وأما التباين فعلى وجهين: لأنه إما أن يكون التباين في نفس العضو، وإما أن يكون في حال العضو. والتباين في نفس العضو، إما أن يكون من حيث هو مركب آلى، وإما أن يكون من حيث هو بسيط أيضا. مثال الأول افتراق الإنسان والفرس في أن للفرس ذنبا وليس للإنسان، وإن كان أجزاء الذنب البسيطة التي للفرس وهي العظم والعصب والجلد واللحم والشعر موجودة له بالجنس. ومثال الثاني افتراق الإنسان والسلحفاة في أن للسلحفاة صدفا يحيط بها وليس للإنسان. وكذلك للسمك فلولس، وللقنفذ شوك، وليس لأشياء كثيرة.

وأما التباين في حال العضو، فإما أن يكون من باب الكم، وإما أن يكون من باب الكيف، وإما أن يكون من باب الوضع، وإما أن يكون من باب الفعل، وإما أن يكون من باب الانفعال. أما الذي من باب الكم، فإما أن يتعلق بالعظم، مثل كون عين البوم كبيرة، وعين العقاب صغيرة، أو يتعلق بالعدد، مثل ما أن أرجل ضرب من العناكب ستة، وأرجل ضرب آخر ثمانية أو عشرة. والذي من باب الكيف فكاختلافهما في اللون، أو في الشكل والصلابة واللين.

وأما الاختلاف في الوضع فمثل اختلاف وضع ثدى الفيل والفرس، فإن ثدى الفيل عند قرب الصدر، وثدى الفرس عند السرة. وأما الاختلاف في الفعل، فمثل كون أذن الفيل صالحة للذب، مع كونه آلة للسمع، وليس كذلك للإنسان؛ وكون أنفه آلة للقبض دون أنف غيره. وأما الاختلاف في الانفعال، فمثل كون عين الخشاف سريعة التحير في الضوء، وكون عين الخطاف بالضد.

وأجزاء بدن الحيوان إما رطبة، وإما يابسة. ومن الرطوبة الدم والشحم والثرث والمخ والمنى وباقي الأخلاط والفضول. ومن اليابسة العصب والجلد والعرق والشعر والعظم والغضروف والظلف والقرن، وما يجري مجراه، فضرب من الاختلاف الحيوانى فى الأعضاء.

وقد يختلف الحيوان من جهة المأوى؛ فبعضها مائية، وبعضها ييسية برية. والمائية على أضرب: منها ما مكانه وغذاؤه وتنفسه مائى، فله بدل التنفس النسيمة تنشق مائى، فهو يقبل الماء إلى باطنه ثم يرده، ولا يعيش إذا فارقه. ومنه ما مكانه وغذاؤه مائى، لكنه مع ذلك يتنفس من الهواء فقط، وسواء كان معدنه في الماء فلا يبرز، أو كان له أن يبرز ويفارق الماء مثل السلحفاة المائية. ومنه ما مكانه وغذاؤه مائى، وليس يتنفس ولا يستنشق، مثل أصناف من الصدف والحلازين التي لا تظهر للهواء ولا تستدخل الماء إلى باطنها إلا على سبيل استنفاد

35 الغذاء لا على سبيل التنفس. وسبيل التنفس أن يستنشقه ثم يرده ليروح الحار الباطن، وليدفع الفضول الحارة، التي إذا احتبست في الحار الغريزي فسد لها الحار الغريزي. فإنما يكون الحيوان مائيا، لأن مكانه الطبيعي ماء، وليس يكون مائيا لأنه لا يغتذى إلا من الماء فقط، ولا يتنفس إلا من الماء فقط.

كما أن الحيوان البري ليس يكون بريا إلا لأن مكانه الطبيعي بر، وليس لأنه لا يغتذى من الماء وما فيه. ومعلوم أن الحيوان الذي لا يستنشق إلا من الماء فليس مكانه الطبيعي إلا الماء، ولا غذاؤه إلا في الماء؛ وأن الحيوان الذي لا يغتذى إلا في الماء، فإن مكانه الطبيعي الماء؛ ولا ينعكس. والحيوانات المائية أيضا تختلف، فبعضها مأواها الذي تنسب إليه مياه الأنهار الجارية؛ وبعضها مأواها مياه البطائح، مثل الضفادع؛ وبعضها مأواها ماء البحر. والحيوان البري منه ما يتنفس من طريق واحد كالقمل والخيشوم، ومنه ما لا يتنفس كذلك، بل على نحو آخر من مسامه

45 مثل المخزرات، كالزنبور والنحل. ومن الحيوانات ما تكون مائية ثم تستحيل برية، مثل حيوان يسمى باليونانية ما دام مائيا أسيداس وهو يعيش في الأنهار، ثم أنه تستحيل صورته ويصير أسطوس ويبرز إلى البر. والحيوانات المائية منها لحية، ومنها شطية، ومنها طينية، ومنها صخرية. والحيوانات المائية منها ذات ملاصق تلزمها كأصناف من الأصداف، ومنها متبرية الأجساد مثل السمك والضفادع.

50 واللاصقة منها ما لا يزال يلتصق ولا يبرح ملصقا مثل أصناف من الصدف، والإسفنجة؛ ومنه ما يلصق ثم يتبرأ، ويبين الملصق لطلب الغذاء، إذ لا يكون غذاؤه الكافي ما يؤديه إليه الماء، أو يتصل به.

ABSTRACT

Avicenna's Liber de animalibus ('Abbreviatio Avicennae'). Preliminaries and State of Affairs

In this article, I provide an overview of the status quaestionis and the current research agenda of Michael Scot's Arabo-Latin translation of Ibn Sīnā's (Avicenna's) *Kitāb al-Ḥayawān*, or *Liber de animalibus* (*Book on Animals*), as part of the Latin translation of the encyclopedia *Kitāb al-Šifā'*. I describe what has been ascertained so far on this topic in an explicit and documented way, opening up paths for future research. I deal with Ibn Sīnā's contribution to the transmission of Aristotle's zoology in the Arab world, with Michael Scot, the author of the Latin translation, and his Arabic model, and with the relationship between Scot's translation and Avicenna's Arabic version — as well as with the original Greek text by Aristotle —, with his style and with the Latin manuscript tradition and its dissemination. I outline the *Nachleben* of the treatise in commentaries, both incunable printings and its reception in the medieval period. In conclusion, I discuss the planned edition of the work, and provide as a sample, in an appendix, the beginning of both the Arabic and the Latin texts.

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RÜDIGER ARNZEN

Double Translations in the Latin Version of the *Metaphysics* of Avicenna's *Kitāb al-Šifā**

1. WHAT ARE DOUBLE TRANSLATIONS OR 'LEÇONS DOUBLES'?

The phenomenon of double translations has been known for quite some time¹. It was first described by Simone Van Riet in various publications of the 1960s² and again in varying intensity and with slightly changing approaches in her subsequent *Avicenna Latinus* editions. Later on, Charles Burnett described the phenomenon in a number of astronomical and mathematical translations³. Roland Hissette discovered and discussed double readings in Latin translations of the works by Ibn Rušd and other Arabo-Latin translations attributed to William of Luna⁴. And Jules Janssens provided an indepth study on the double

* I am most grateful to Prof. Amos Bertolacci and two anonymous referees for their corrections and helpful remarks.

¹ The following observations focus on double translations in Arabo-Latin translations. It is worth mentioning that the same phenomenon occurs also in scientific translations from Greek into Latin, which cannot be taken into consideration here. For examples cf. J. JUDYCKA ed., *Aristoteles, De generatione et corruptione. Translatio vetus*, Brill, Leiden 1986 (Aristoteles Latinus, vol. IX,1.), pp. XX-XXVI; F. BOSSIER, J. BRAMS, *Aristoteles, Physica. Translatio vetus. Praefatio*, Brill, Leiden 1990 (Aristoteles Latinus, vol. VII,1), pp. XLI-XLII, XLVI-LXXIX; G. VUILLEMIN-DIEM ed., *Aristoteles, Metaphysica lib. I-XIV. Praefatio*, Brill, Leiden 1995 (Aristoteles Latinus, vol. XXV,3.1), pp. 206-242.

² E. g. S. VAN RIET, *La traduction latine du « De Anima » d'Avicenne. Préliminaires à une édition critique*, « Revue philosophique de Louvain », 61, 1963, pp. 583-626.

³ E. g. C. S. F. BURNETT, *Literal Translation and Intelligent Adaptation amongst the Arabic-Latin Translators of the First Half of the Twelfth Century*, in *La diffusione delle scienze islamiche nel Medio Evo Europeo*. Convegno internazionale promosso dall'Accademia nazionale dei Lincei, Fondazione Leone Caetani, e dall'Università di Roma « La Sapienza » (Roma, 2-4 Ottobre 1984), Accademia dei Lincei, Roma 1987, pp. 9-28; Id., *Translating from Arabic into Latin in the Middle Ages: Theory, Practice, and Criticism*, in S. G. LOFTS, P. W. ROSEMANNS eds., *Éditer, traduire, interpréter: essais de méthodologie philosophique*, Peeters, Louvain-la-Neuve 1997, pp. 55-78.

⁴ E. g., R. HISSETTE ed., *Averrois Commentum medium super libro Peri Hermeneias Aristotelis. Translatio Wilhelmo de Luna attributa*, Peeters, Leuven 1996 (Averrois Opera. Series B: Averroes Latinus; vol. XII.), pp. 90*-106*, 120*-138*, 143*-146*; Id. ed., *Averrois Commentum medium super libro Porphyrii. Translatio Wilhelmo de Luna attributa*, Peeters, Leuven 2016 (Averrois Opera. Series B: Averroes Latinus; vol. X.), pp. 81*, 90*-94*, 110* n. 151, 117*-124*; Id., *Des traductions doubles et Guillaume de Luna ou de Lunis*, in J. HAMESSE ed., *Les traducteurs au travail. Leurs manuscrits et leurs méthodes. Actes du Coll. int. organisé par le "Ettore Majorana Centre for Scientific Culture" (Erice, 30 septembre – 6 octobre 1999)*, Brepols, Turnhout 2001, pp. 257-273.

translations occurring in the Latin version of Ibn Sīnā's *Physics* of the *K. al-Šifā*⁵. Nevertheless, the conception of double translations — or 'leçons doubles' in Van Riet's terminology — is in a number of respects rather ambiguous. While there can be no doubt that the different phenomena subsumed under this term bring serious trouble upon the editor of the relevant Latin text, the exact delimitation of the concept and especially its distinction against the phenomenon of variant readings caused by palaeographic problems in the manuscript transmission are rather vague.

In what follows I apply the term to the phenomenon in which the manuscripts of an Arabo-Latin translation display two synonymous or semantically closely related Latin words or phrases rendering one and the same Arabic word or phrase at one and same place of the text in question (not to be confused with two synonyms occurring at disparate places, i.e. terminological inconsistencies by the translator). In some cases, the two Latin words or phrases occur together in one and the same manuscript, in others either of them is attested in one branch of manuscripts to the exclusion of the other. The phenomenon covers every-day language as well as technical terminology and concerns all parts of speech, no matter whether verbs (e.g. inflections of *ponere* or *ordinare* for *waḍa'a*), nouns (e.g. *quantitas* or *mensura* for *qadr*), adjectives and adverbs (e.g. *aliquando* and *fortassis* for *rubba-mā*), pronouns (e.g. *hoc* or *id* for *hādā*), particles (e.g. *vero* or *enim* for *fa-innahū* at the beginning of a sentence), prepositions (e.g. *sine* or *absque* for *bi-lā*), or conjunctions (e.g. *quod* or *ut* for *anna*).

For the sake of clarity it is noteworthy that the above definition of double translations differs in at least three respects from what Van Riet meant by 'leçons doubles', as becomes clear from the examples she provided in her *Avicenna Latinus* editions. According to Van Riet, 'leçons doubles' include also two semantically clearly distinct Latin words or phrases related — through their contextual position — to one Arabic word or phrase. E.g., *Annexe II (Deux recensions du « Tractatus primus »)* of her edition of Bk. I of Ibn Sīnā's *Physics* of the *K. al-Šifā* provides the readings *infinitum* and *definitum* as examples of 'leçons doubles' for Arabic *maḥdūd*, or *suos profectus* and *suas perfectiones* for Ar. *kamālātihā*⁶. In my view, it is much easier and more plausible to explain different Latin readings of this type as the result of a faulty transmission of the Latin manuscripts than as competing translations of one and the same Arabic word.

⁵ J. JANSSENS, *L'Avicenne latin: particularités d'une traduction*, in J. JANSSENS, D. DE SMET eds., *Avicenna and His Heritage*. Acts of the Int. Coll., Leuven - Louvain-la-Neuve, Septembre 8-11, 1999, Leuven University Press, Leuven 2002, pp. 113-129.

⁶ AVICENNA LATINUS, *Liber primus naturalium. Tractatus primus de causis et principiis naturalium*. Édition critique [...] par S. VAN RIET, Peeters, Louvain-la-Neuve 1992, p. 89* ad p. 46.63, p. 91* ad p. 56.38.

Secondly, Van Riet counts among 'leçons doubles' Latin words or phrases that can be traced back to two different readings of the Arabic text. In the introduction to Avicenna's *Liber de anima*⁷, Van Riet mentions the competing readings *sursum* and *virtutes* which in all likelihood trace back to an Arabic manuscript in which the word *al-fawqu* (= *sursum*) was written without diacritical points, thus looking similar to *al-quwā* (= *virtutes*). Similarly, Van Riet includes in her list of 'leçons doubles' in Bk. I of Ibn Sīnā's *Physics* the competing readings *translativum* and *aequivocum*⁸. The Cairo edition of the Arabic text (p. 48.6) reads at this place *muštarak*, to which neither of the two Latin terms corresponds, since *muštarak* is usually translated through *communis* in the *Physics*. *Aequivocum* rather points to the Arabic term *mušakkak*. *Translativum* on the other hand corresponds neither with *muštarak* nor with *mušakkak*. In the *Liber de anima* of the *K. al-Šifā'* we find *translatum est* for Arabic *intaqala* (255.15-16 = 125.6). I therefore assume that the translation *translativum* is based on the Arabic reading *muntaqil*. In any case, *translativum* and *aequivocum* reflect different readings or interpretations of what the translator found in the Arabic manuscript, if not in two different Arabic manuscripts.

Thirdly, Van Riet links her conception of 'leçons doubles' to the editorial process of distinct recensions of the translation and — as a consequence — conceives also omissions and additions as testimonies of double recensions/translations⁹. This conception is methodically questionable, because it is often simply impossible to decide whether an omission or addition has been applied deliberately in an intentional process of translation or revision or whether it is rather the result of a mishap in the transmission of the text or a nonreflective intervention by a scribe.

Hence, double translations in the strict sense of the term should be kept apart from these three types of discrepancy between Arabic text and varying Latin translations. It goes without saying that the second type, that is competing Latin words tracing back to different Arabic readings, is of special interest not only for the history of Arabo-Latin translations, but also and especially for the consideration of the Latin testimonies as a relevant source for the establishment of a critical edition of the Arabic text (cf. below).

⁷ AVICENNA LATINUS, *Liber de anima seu sextus de naturalibus I-II-III*. Édition critique [...] par S. VAN RIET, Peeters, Louvain-la-Neuve 1972, p. 130* f.

⁸ AVICENNA LATINUS, *Liber primus naturalium* cit., p. 88* ad p. 41.14.

⁹ Cf. *Annexe II* (*Deux recensions du « Tractatus primus »*) of her edition of Bk. I of Ibn Sīnā's *Physics*, which includes roughly 170 examples.

2. EXPLANATORY APPROACHES AND MANUSCRIPT EVIDENCE

As regards the question what might have caused the phenomenon of double translations we are faced principally with two models of explanation in the scholarly literature: *Hypothesis 1* may be called ‘One-Recension-Hypothesis’ and is advocated by Jules Janssens and Roland Hissette¹⁰. It assumes that most or all double translations trace back directly to the translator and were present altogether in one form or another in the translator’s original exemplar. As possible reasons for this procedure the following considerations are adduced: the translator hesitated (especially during the first stage of his work) as to which of the two alternative words or phrases represents the Arabic text more appropriately, or the translator was not sure about the exact meaning of the Arabic word, or the translator himself revised here and there his first provisional draft. What is common to all these assumptions is the fact that they impose the conclusion that the translator conceived his double translations as preliminary alternative options, which ideally should be replaced through a single uniform translation in the end. Alternatively, one may consider the possibility that at least some of the double translations were introduced not as either-or, but rather as deliberate combination of two related expressions aiming at a careful representation of different semantic nuances of one Arabic word or phrase. This phenomenon — the so-called figure of hendiadys — is a very well known and wide-spread technique of the 9th and 10th centuries Graeco-Arabic translations¹¹. As a matter of fact, the evidence of this technique in 12th century Arabo-Latin translations has been indicated long ago by Charles Burnett¹², yet to my knowledge it has not been taken into consideration in the context of double translations or ‘leçons doubles’.

Hypothesis 2 was advocated by Simone Van Riet and may be called ‘Multiple-Recensions-Hypothesis’. Unlike *Hypothesis 1* it assumes two or more chronologically remote recensions, i.e. an early recension or *texte ancien*, possibly identical with the translator’s version, which then has been revised once or in several successive stages by other hands and finally resulted in what

¹⁰ Cf. JANSSENS, *L’Avicenne latin* cit., and R. HISSETTE, *L’Avicenna Latinus et le livre I de la Physique (Sufficientia)*. À propos d’une édition en cours, « *Revue Philosophique de Louvain* », 109, 2011, pp. 341–354.

¹¹ For examples cf. M. ULLMANN, *Die Nikomachische Ethik des Aristoteles in arabischer Übersetzung. Teil 2: Überlieferung, Textkritik, Grammatik*, Harrassowitz, Wiesbaden 2012, pp. 278–280; G. ENDRESS, R. ARNZEN, Y. ARZHANOV, *Glossarium Graeco-Arabicum*, <http://telota.bbaw.de/glossga/>. Select: *Advanced search* → under *Arabic expression*, enter: ‘hend.’ [i. e. hendiadys].

¹² BURNETT, *Literal Translation and Intelligent Adaptation* cit., p. 11 f. For further examples cf. also K. YAMAMOTO, C. BURNETT eds., *Abū Ma ‘šār on Historical Astrology*, 2 vols., Brill, Leiden etc. 2000, vol. II, Arabic-Latin Glossary, nos. 255, 576, 734, 1071, 1138, 1377, 1523, 1725, 1849, 2038, 2195, 2270, etc.

Van Riet calls *texte revu*. This redactional process aimed at smoothening the Latin style, eliminating semitisms, replacing literal translations through intelligent adaptations, and harmonising the terminology with the standard Aristotelian terminology. According to Van Riet it was performed partly with recourse to the Arabic text and partly without, that is, it included intralinguistic editorial modifications besides cross-linguistic (double) translation activities in the strict sense. However, Van Riet omits to provide any criteria (no matter whether linguistic, palaeographic or codicological) for a systematic differentiation between translational and editorial processes.

In addition to the above-mentioned qualms, both hypotheses suffer from three methodical shortcomings: 1. They tar all different kinds of double translations with the same brush, no matter whether we are faced with alternative translations of isolated technical terms, of a whole sentence including significant syntactic transformations, or with rather marginal replacements such as the substitution of *de* through *ex* corresponding to Ar. *min*. 2. They are conceived as being mutually exclusive, although — as far as I see — nothing speaks against the assumption that various types of translational and editorial processes took place in the course of the formation and transmission of the text (to be more precise, [i] *ad hoc* alternative double translations by the translator, [ii] intentional *ad hoc* use of hendiadys by the translator, [iii] the translator revising his first draft, [iv] modifications by a later reviser/translator on the basis of an Arabic manuscript, [v] intralinguistic modifications by a later reviser without recourse to the Arabic text). 3. They affect or even predispose the modern editor's approach to the evaluation and stemmatic assessment of the testimonies of the text in question by insinuating a systematic correlation between manuscript transmission and implementation of certain translation techniques.

Once we turn from these models of explanation to the actual manuscript evidence, the situation is getting more complicated. In the manuscript transmission of Avicenna's *De anima*, *Physics* and *Metaphysics* of the *K. al-Šifā'* we are faced basically with two distinct scenarios, each of which requires different explanations depending on whether we follow *Hypothesis 1* or *2*. In the first scenario, which — in terms of frequency — is much better documented than scenario 2, we find one of the two words or phrases, which together constitute the phenomenon of a double translation, attested in one branch of manuscripts (e.g. Φ), and the other respectively in the other branch (e.g. Ψ). If we wish to explain this evidence on the basis of the One-Recension-Hypothesis, we have to assume that both branches of manuscripts depend ultimately on the translator's original or one of its copies containing both readings. On the basis of this version, the hyparchetype of Φ reproduced in each case only one of the two alternative or complementary readings, whereas the hyparchetype of Ψ

chose exactly the opposite way by reproducing the other word or phrase. This assumption seem to be quite unlikely and arbitrary, unless we modify it in such a way that the translator's original or its relevant copy clearly set apart the two readings, for example by placing one of the two readings consistently in the margins. This assumption entails important consequences. First, it precludes the above assumption of the translator's occasional deliberate use of the figure of hendiadys; and secondly it affects the evaluation of the manuscripts and their stemmatic relationship: the deliberate decision of the scribes of the hyparchetypes of Φ and Ψ to reproduce only one of the two words or phrases used by the translator constitutes in a certain way a 'conjunctive error' of each family. Since it is rather unlikely that the particular modes of handling the double translations are the only characteristic shared by the descendants of Φ and Ψ , one would expect, provided the inference is correct, further common errors in each branch of manuscripts. On the other hand, any manuscript differing from Φ and Ψ by containing one of the two readings in the main body of text and the other one in the margin or vice versa must be considered either as being close to the original and hence of relatively high relevance for the establishment of the critical edition or as being contaminated from the other side, depending on whether or not it shares the conjunctive errors of one of these families.

The opposite is true, if we explain scenario 1 on the basis of Van Riet's Multiple-Recensions-Hypothesis. Her explanation is much more straightforward such that branch Φ simply draws on one recension of the text, while the manuscripts of branch Ψ depend on the other recension. Accordingly, any critical edition must aim at constituting one of the two recensions to the exclusion of the other, whereas any manuscript containing both readings is judged by Van Riet as being contaminated and less important for the *constitutio textus*.

In a number of manuscripts we are faced with another situation, scenario 2: Such manuscripts — originating from the same period as those pertaining to scenario 1 — transmit the two words or phrases of a double translation together written by the same hand. Some of these manuscripts contain one reading in the main text, the other in the margins or between the lines, others contain both readings in the main text either simply juxtaposed or interlinked by conjunctions, again others display a combination of these two modes. Obviously, this scenario requires for a plausible explanation on the basis of Van Riet's Multiple-Recensions-Hypothesis the assumption of a contamination of the exemplar of one recension from an exemplar of the other recension. Three facts speak against this possibility: First, one would expect that the allegedly contaminated manuscripts derive from the later stage of manuscript transmission, while the manuscripts displaying scenario 1 originate from the earlier period. This, however, is not the case: on the contrary, some of the

allegedly contaminated manuscripts belong to the group of the oldest extant ones. Secondly, we encounter not only manuscripts following one reading *in textu* and adding the other reading *in margine*, but also manuscripts which have it exactly the other way around. As already pointed out by Jules Janssens¹³, this requires the assumption that not only one scribe was in the lucky position to use two manuscripts transmitting — according to *Hypothesis 2* — two different recensions, but even two scribes, and this exactly in both traditions, that is in the opposite directions of contamination, which of course cannot be precluded but is not very likely. Finally, one would be hardly pressed to find a plausible explanation for the different modes of contamination (juxtaposition vs. conjunction vs. separation *in textu/in margine/supra lineam*).

On the other hand, if we adhere to the One-Recension-Hypothesis in order to explain scenario 2, we can be relatively sure that the distinction between double translations added in the margins or interlinearly and those included in the main text by juxtaposition or interlinked through conjunctions was already part of the translator's original and may possibly reflect different stages in the process of translation or alternative translations as opposed to complementary translations via hendiadys.

To sum up these general remarks: At the current state of research it is difficult to provide incontestable proves in favour of one of the two controversial hypotheses. I agree with Janssens and Hissette that Van Riet's Multiple-Recensions-Hypothesis is less probable. However, the most important and decisive step proving the One-Recension-Hypothesis has still to be done, namely a new collation and filiation of the manuscripts. The corner-stone of Van Riet's editorial procedure is the division of the manuscripts into two groups each of which representing one of the two alleged recensions. But if there were no such recensions, but only one authorial version containing all or most of the double translations, the careful collation of the manuscripts in all likelihood will lead to an entirely different filiation displaying dependencies, conjunctive and separative errors etc. among manuscripts containing here this reading, there the other one and again in another case both readings together. Furthermore, one should take into consideration a combination of both hypotheses such that the different modes of transmission of the double translations summarized here as scenarios 1 and 2 and its different subvariants possibly point to the fact that we are indeed faced with both double translations introduced by the translator himself as well as those tracing back to one or more later revisions, especially in cases of mere stylistic retouching or of harmonising the translation with the standard Aristotelian terminology.

¹³ JANSSENS, *L'Avicenne latin cit.*, p. 114.

3. DOUBLE TRANSLATIONS IN AVICENNA'S *METAPHYSICS* OF THE *K. AL-ŠIFĀ*¹⁴

As already stated above, double translations occur in the *Metaphysics* in the same way as in the other parts of *Avicenna Latinus*. Thus, the first and most important question for the critical edition of the text is whether we are faced with two distinct recensions of the text, or whether what seem to be distinct recensions are mere descendants of a faulty manuscript transmission of one and the same authorial version. In the first case, it would be the editor's task to decide whether to edit recension A or recension B, whereas in the second case the overall aim of the critical edition would consist in reconstructing the translator's original version including all his double translations, as — for example — done by Hissette in his Ibn Rušd editions. In order to solve this problem, one would have to make a fresh start and collate all manuscripts prior to any preconception regarding distinct recensions and see how the different modes of transmission relate to the stemmatic filiation of the manuscripts and their codicological evidence. It goes without saying that this first question goes far beyond the scope of the present paper.

Another question concerns the frequency and distribution of double translations in the *Metaphysics*. In the introduction to her edition of Avicenna's *Philosophia prima*, books V to X, Van Riet states that from Bk. V onwards she did not observe any consistent occurrence of double translations¹⁴. A similar statement — now concerning Ibn Sīnā's *Physics* of the *K. al-Šifā* — is found in Van Riet's introduction to her 1992 edition of the *Liber primus naturalium*, where she maintains that the double translations which are numerous in Book I, disappear almost completely in Books II and III of the *Physics*¹⁵. As far as the *Physics* is concerned, this assertion has been disproved by Jules Janssens in the article mentioned earlier. In view of this fact, it seems advisable to check also Books V to X of the *Metaphysics* for further double translations.

Two further questions arise directly from my above considerations, namely whether all double translations in the *Metaphysics* trace back to one and the same Arabic exemplar, and whether they admit any inference regarding the two contentious hypotheses concerning their genesis.

Let us start with the second question. As indicated above, Van Riet distinguishes between two groups of manuscripts, the one transmitting what she calls *texte ancien*, the other transmitting the so-called *texte revu*. Since she

¹⁴ « A partir du livre V, nous n'avons plus observé la présence régulière de "leçons doubles" », AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina. V-X. Édition critique [...]* par S. VAN RIET, Peeters, Louvain-la-Neuve 1980, p. 82*.

¹⁵ AVICENNA LATINUS, *Liber primus naturalium* cit., p. 55*.

decided to publish the *texte ancien*, she consequently relied for her edition on four manuscripts pertaining to this branch of the text transmission. In addition to these manuscripts, Van Riet used one manuscript representing the so-called *texte revu*, in order to illustrate the differences between the two versions and their double translations. This manuscript is the 14th century *Latinus 6443* of the Bibliothèque Nationale in Paris with the siglum *P* in Van Riet's edition¹⁶. Fortunately, Van Riet did not restrict herself to noting the different transmission of what she conceived as 'leçons doubles', but incorporated in her critical apparatus also all kinds of variant readings of manuscript *P*. Thus, a first step for checking Books V to X of the *Metaphysics* for double translations could be performed by examining the variant readings noted in the critical apparatus under the siglum *P* to the exclusion of the other manuscripts used by Van Riet. During this search, I left out of consideration all notes referring to additions and omissions in *P* because of the reservations explained earlier. Furthermore I ignored all readings added by another hand in this manuscript as we do not know how this hand relates to the rest of the tradition. Whenever the wording noted in the apparatus pointed not to a variant reading tracing back to a faulty manuscript transmission, but rather to the remnants of a double translation, I collated the reading in question with the following two other testimonies: first with the relevant Arabic text of the Cairo edition, and secondly with another Latin manuscript which has not been used by Van Riet. This additional Latin manuscript is the *Vaticanus latinus 4428*. According to Marie-Thérèse d'Alverny's description of the *Avicenna Latinus* manuscripts, it dates from the middle or second half of the 13th century, that is from the same period as the other four manuscripts used by Van Riet¹⁷. This manuscript belongs also to the tradition labelled as *texte revu* by Van Riet and seems to be closely related to manuscript *P*¹⁸. In what follows, I refer to it by the siglum *R*. The below conspectus shows the results of this collation.

¹⁶ On this manuscript see M.-T. D'ALVERNY, *Avicenna Latinus I*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 28, 1961, pp. 310-314.

¹⁷ Cf. M.-T. D'ALVERNY, *Avicenna Latinus III*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 30, 1963, pp. 266-268.

¹⁸ A probational collation exhibited a number of faults and omissions shared by these two manuscripts against the other four manuscripts used by Van Riet.

Double translations in Books V-X of Avicenna's Metaphysics (page & line ref. to ed. Van Riet):

Bk. V (64 pages)	278.19	345.57	406.28	481.45
228.21.22.24.36	283.24	347.93	413.84.86	486.54.62
229.47-48	284.46.57		414.08	488.2
230.64	290.72.82	VII (27 pages)	416.46	492.77.93
231.80		356.61	419.03	493.11
232.13	VI (58 pages)	359.22	424.10	497.79
233.24	291.10	361.44		501.68
236.92.07	292.33.37	365.33		504.28.51
237.12.18.21	294.63	366.69	IX (87 pages)	505.74
240.87.91.92	302.34	368.97.08	435.18.30	507.93
241.5	303.60	369.24.27	437.56.69.70	508.32
244.67.68.77	312.54	370.51	438.76	510.72
245.85	316.46	373.25	441.46	519.52
248.30	317.63		443.86	520.66.83
253.35	327.81	VIII (57 pages)	446.39	
255.59	328.06	376.04	450.23	
257.01.04	329.20	377.35	451.28	X (33 pages)
260.58	331.78	378.57.58	455.07	524.47.55
262.06	334.38	381.24	465.99.00	531.89.90
266.91	335.55.64	384.71	472.45	541.49
267.09	341.87	385.93.02(bis)	474.93-94	543.80
270.59	342.11	387.33	476.40	547.41.42
273.38	343.16	402.50	478.79	548.53

The transmission of Books V–X of Avicenna's *Metaphysics* of the *K. al-Šifā'* as attested in mss. *P* and *R* displays more than 130 variant translations not attested in any other manuscript used by Van Riet. As becomes clear from the number of pages given in this conspectus, the frequency of double translations is consistent and evenly distributed over all six books, which confirms the results presented by Jules Janssens regarding the Latin translation of Avicenna's *Physics* of the *K. al-Šifā'*, namely that we are not faced with a partial revision as maintained in either case by Van Riet.

At a closer look we see that these double translations concern all different parts of speech. The following tables display some examples for the major word classes. By far the largest group is formed by alternative uses of Latin conjunctions and particles.

Double translations in Books V-X of Avicenna's Metaphysics: Conjunctions & particles

Ar. Cairo ed. = Lat. ed. Van Riet	Arabic	mss. PR	mss. DFNV = ed. Van Riet
(1) 196.2 = 228.21; 265.10 = 302.34; 374.17 = 437.56, 394.3 = 465.99	anna (inna <i>after</i> qāla)	quod	ut
(2) 285.9 = 328.06	aw	vel	sive
(3) 220.4 = 255.59	al-āna	ergo	nunc
(4) 288.3 = 331.78	bi-ḥasabi	quod	quia
(5) 291.8 = 335.64	fa-	autem	enim
(6) 252.6 = 290.72	fa-	enim	autem
(7) 198.4 = 230.64	fa-	tamen	tunc
(8) 200.10 = 232.13	fa-	vero	autem
(9) 247.5 = 278.19; 257.7 = 291.10; 258.9 = 292.37; 259.7 = 294.63; 290.4 = 334.38; 357.4 = 414.08; 360.3 = 419.03; 425.15 = 510.72; 431.9 = 519.52	fa-	ergo	igitur
(10) 285.18 = 329.20	fa-iḍan	enim	autem
(11) 208.10 = 240.92	fa-inna	autem	enim
(12) 198.13 = 231.80	fa-inna	enim	vero
(13) 234.1 = 283.24	fī (+ <i>n.a.</i>)	ad hoc quod (ut R)	ad hoc ut
(14) 204.14 = 237.18	li-anna	autem	enim
(15) 273.1 = 312.54	li-anna	ergo	enim
(16) 298.10 = 345.57	li-anna	quod	quia
(17) 221.16 = 257.01	wa-	tamen	autem (<i>om. N</i>)
(18) 238.1 = 267.09; 234.15 = 284.46	wa-	autem	vero
(19) 266.7 = 303.60	wa-	autem	enim
(20) 203.15 = 236.92	wa-	enim	autem
(21) 258.6 = 292.33	wa-	enim	vero
(22) 291.1 = 335.55	wa-	ergo	autem
(23) 276.10 = 317.63	wa-	vero	autem
(24) 296.6 = 341.87	wa-ammā	vero	autem
(25) 276.1 = 316.46	wa-innamā	autem	enim

As one can see from examples 5-12 and 17-25, there are all kinds of double translations for the small conjunctions *fa-* and *wa-*, for which we find in most cases *autem*, *enim*, *ergo*, *igitur* and *vero* replacing each other in both directions, and this apparently quite systematically in the case of *ergo* and *igitur* for resumptive *fa-* (example 9). Another conspicuous issue is the replacement of *quod* through *ut* (or vice versa¹⁹, examples 1 and 13). In most cases, a mere confusion of Latin abbreviations can be precluded.

*Double translations in Books V-X of Avicenna's Metaphysics: Pronouns*²⁰

Ar. Cairo ed. = Lat. ed. Van Riet	Arabic	mss. PR	mss. DFNV= ed. Van Riet
222.1 = 257.04 197.4 (bis) = 229.47.48 347.11 = 402.50 400.15 = 474.93 327.4 = 376.04 320.1 = 370.51	bi-mā huwa min ḥayṭu huwa sā'iru c. gen. šay'un hādā wāḥidun wāḥidun	ex eo quod ex eo quod omnia P : ceteras R id hoc P : id R uterque	ex hoc quod ex hoc quod ceteras res id unusquisque

Double translations in Books V-X of Avicenna's Metaphysics: Prepositions

Ar. Cairo ed. = Lat. ed. Van Riet	Arabic	mss. PR	mss. DFNV= ed. Van Riet
336.3 = 387.33; 350.6 = 406.28 209.1 = 241.05 235.5 = 284.57 204.7 = 236.07 212.8 = 245.85 413.1 = 492.77 447.16 = 543.80	bi- bi-lā fī fī nafsihī min min min	propter sine cum per se ab de ex	per absque in in se ex ex de

Again, palaeographic problems or mere confusions of Latin abbreviations can be precluded in most cases. The question whether or not one of the two versions points to a more primitive or literal mode of translation or, conversely,

¹⁹ For the order of *texte ancien* and *texte revu* see also D. N. HASSE, *Avicenna's De anima in the Latin West. The Formation of a Peripatetic Philosophy of the Soul 1160-1300*, Warburg Institute, London 2000 (Warburg Institute Studies and Texts, vol. 1), p. 8.

²⁰ For double translations in Ibn Sīnā's *Physics* using different types of Latin pronouns see also JANSSENS, *L'Avicenne latin cit.*, p. 120.

to a stylistic reworking is beyond my expertise. Perhaps more revealing or instructive in this respect are double translations using verbs and nouns.

Double translations in Books V-X of Avicenna's Metaphysics: Verbs

Ar. Cairo ed. = Lat. ed. Van Riet	Arabic	ms. PR	mss. DFNV = ed. Van Riet
(1) 334.15 = 385.93 (2) 358.5 = 416.46 (3) 387.9 = 455.07 (4) 424.10 = 508.32 (5) 200.16 = 233.24 (6) 244.3 = 273.38 (7) 204.16 = 237.21 (8) 328.6 = 377.35 (9) 334.15 = 385.93 (10) 402.5 = 476.40 (11) 441.8 = 531.89 ; 441.9 = 531.90 (12) 384.12 = 451.28 (13) 214.9 = 248.30 (14) 333.18 = 384.71 (15) 204.10 = 237.12 (16) 196.5 = 228.24	bāṭilun bāna tabayyana yaḥinnu ḥālaṭahū rudda (naḥnu) bi-sabīlihī taṣṭariku al-iṣṭigāl bi-ḍikrihī ṣaḥḥa ʿaqdun qaddamnāhu muqawwamun tukullima iktanafa lahū	nihil debet terminatum est notum est elevatur sibi adiunctum reducitur credimus conveniunt veritati de eo scitum est uniri praediximus constructa legitur circumdederunt vel circumvenerunt P : circumdederunt I' circumvenerunt R habeat	nihil valet claruit innotuit allicitur sibi admixtum redigitur intendimus communicat tractare de eo certum est vincire supra diximus constituta loquitur circumdederunt esse <i>c. gen.</i>

Example 15 is worth noticing, as manuscripts *P* and *R* give both competing translations connected through *vel*. However, in view of the similarity of the two words a mere addition by a scribe due to palaeographic problems cannot be ruled out. In general, the version transmitted in the four manuscripts in the right column seem to be more literal and closer to the Arabic than what is found in mss. *P* and *R* (see example 2 with *claruit* for *bāna* instead of *terminatum* in *P* and *R*, or ex. 4 with *allicitur* for *yaḥinnu* ['to desire, to be attracted by s.th.'] instead of *elevatur*). The same holds true for examples 9, 10, and 13 where the version transmitted in mss. *DFNV* is closer to the Arabic. Assuming that this version was the original one, so far nothing prevents us from conceiving the alternative translation attested in *P* and *R* as being done without recourse to the Arabic text.

Double translations in Books V-X of Avicenna's Metaphysics: Nouns, adjectives & adverbs

Ar. Cairo ed. = Lat. ed. Van Riet	Arabic	mss. PR	mss. DFNV = ed. Van Riet
(1) 196.4 = 228.22	al-ğuz'iyyu l-mufradu	individuum vel singulare	individuum (+ vel singulare <i>s.l.</i> N)
(2) 224.2 = 260.58	ğumlatun	genus	universitas
(3) 226.2 = 262.06	yağūzu an	rationale est	possibile est
(4) 237.5 = 266.91	ħaddun	designazione	definitione
(5) 297.3 = 343.16	ħuqqiqa wa-ħuṣṣila	vere inquiratur	diligenter inquiratur
(6) 309.8 = 356.61	fī l-ħaқиqati	naturae	vere
(7) 208.7 = 240.87	ṭabī'atun	materia	natura
(8) 399.2 = 472.45	'ilmun	cogitatio	cognitio
(9) 208.10 = 240.91	ma'nan	essentiam	intentionem
(10) 284.12 = 327.81	fikrun	cognitio	cogitatio
(11) 284.12 = 327.81	tafakkurun	cognitio	cogitatio
(12) 421.2 = 504.28	ka-dālika	sic	similiter
(13) 240.4 = 270.59	kaṭratun	multitudo vel pluralitas	multitudo
(14) 209.6 = 241.12 ; 211.10 = 244.67 ; 211.12 = 244.68 ; 212.1 = 244.77	kulliyyatun	unitas	universalitas
(15) 315.10 = 365.33	māddatun	natura	materia
(16) 335.2 = 385.02	imkānun	possibilitas P: potestas R	potestas
(17) 419.2 = 501.68	namaṭ al-wuğūd	(!) in aula ^a essendi	maneria essendi
(18) 373.12 = 435.18	wuğūdiyyun	in existentia	inveniencia (inventiva V)
(19) 196.13 = 228.36	al-wāḥidiyyatu	universalitas	unitas
(20) 318.8 = 368.08	muttafiqun	communis	conveniens
(21) 218.14 = 253.35	an yatawāhhama	opinione vel putatione P: opinione vel permutatione (+ putatione <i>s.l.</i> R)	putatione DN ed. : opinione FV

^a Cf. PEDRO DE ALCALA, *Vocabulista*, Grenade 1505; Dozy, *Supplément*, 726b.

Again, we find P and R in some cases transmitting both terms of a double translation joint through 'vel' as in examples 1, 13, and 21. Interestingly, in the first case one of the four other manuscripts, the manuscript *Biblioteca Nazionale di Napoli VIII.E.33*, which dates also from the 13th century, transmits the alternative translation 'vel singulare' *supra lineam*, whereas in example 21 we find each of the two competing translations 'opinione vel putatione' for *an*

yatawahhama isolated in two of these four manuscripts to the exclusion of the other two. Note that the second term, 'putatione', at a first stage was incorrectly copied in manuscript R, then corrected there above the line. This may point to its interlinear or marginal transmission which is often characterized by a smaller and thus error-prone handwriting. In other cases it is not quite clear whether we are faced with real double translations or rather faulty transmissions due to ligatures or abbreviations in the Latin text. This concerns for example the words 'cogitatio' and 'cognitio' for Arabic *'ilm* (ex. 8) and for Arabic *fikr* and *tafakkur* (ex. 10 and 11), as well as the words 'materia' and 'natura' for Arabic *ṭabī'a* (ex. 7) and *mādda* (ex. 14). In many Latin manuscripts the two words are abbreviated in such a way that they can be easily confused with each other. Likewise, 'unitas' may be a misrepresentation of an abbreviated form of 'universalitas'. It occurs in manuscript P at least four times for Arabic *kulliyya* (ex. 14). However, a double translation cannot be precluded beforehand, as P and R use 'universalitas' to render Arabic *wāḥidiyyatun* (ex. 19) as opposed to 'unitas' in the other four manuscripts, and 'unitas' would be a tolerable interpretation of the Arabic term. Finally, one might also consider the opposite way, i.e. the reading 'universalitas' as a faulty resolution of an abbreviated form of 'unitas'. Example 17 is quite interesting for the lexicographer. The Arabic reads *namaṭ al-wuḡūd*. The four manuscripts in the right column transmit for Arabic *namaṭ* the medieval Latin word 'maneria' which is at other places in the *Avicenna Latinus* used for *bāb*, *ḍarb*, *naw'* and similar terms. Manuscripts P and R read instead 'in aula', while they transmit 'maneria' at other places correctly. Strange as it is, we learn from Dozy's *Supplément aux dictionnaires arabes* that according to Pedro de Alcalá's *Vocabulista*, *namaṭ* (with the plural form *anmiṭatun*) has the meaning 'vestibule' or 'space in front of the altar', which corresponds quite exactly with 'aula' in P and R. But if that is indeed the correct explanation for this strange double translation, then we must revise our previous assumptions and state that at least in this case none of the two versions can be explained as a mere stylistic revision of the other, but certainly requires the translator's or reviser's recourse to the Arabic text.

This brings us to our next question, that is whether the alternative translations have been prepared by consulting the Arabic text and, if so, whether all double translations trace back to one and the same Arabic exemplar. On this question the following four points are worth mentioning:

(i) In the overwhelming majority of the cases taken into account so far, the difference between the two competing translations does not give rise to the assumption that these are the result of two independent consultations of the Arabic text. This is especially evident in the case of particles, conjunctions,

pronouns and prepositions. Obviously neither the translator himself nor a later reviser would bother to go back to the Arabic manuscript in order to replace an *enim* by *autem*, *ex* by *de*, or *quod* by *ut*.

(ii) Another thing, which points rather to an intralinguistic revision than to a repeated consultation of the Arabic text is the fact, that almost all variant translations adhere to one and the same part of speech. In other words, a Latin conjunction is replaced by another conjunction, a verb by a verb, a noun by a noun and so on, and this even in those cases where the relevant part of speech in the Latin text differs from that of the translated Arabic word or phrase, that is, where one would expect that the more literal of the two competing translations sticks to the syntactic structure of the Arabic phrase as opposed to the more latinized second adaptation. This latter phenomenon is well-known from competing Arabic translations of one and the same Greek text, where both new or independent translations as well as revisions are marked by a much higher frequency of fluctuation between different word classes, while the strict conformity of the word classes in our case rather points to a mere terminological and stylistic revision.

(iii) In a number of cases, the double translations may have been introduced by the translator deliberately and in one and the same process of translation as a hendiadys, that is, in order to reflect different semantic nuances of the Arabic word or phrase, and not in order to replace each other.

(iv) In contrast to the above-mentioned cases, another group of competing translations evidently points to a direct recourse to the Arabic text in each version. The nature of some of these variant translations even suggests that they were prepared on the basis of different Arabic manuscripts or of an Arabic manuscript offering alternative readings/corrections *in margine* or *supra lineam*. This suggestion is confirmed by the fact that a number of such double translations reflect variant readings of the Arabic manuscripts reported in the notes to the Cairo edition. One may call such cases ‘false’ double translations, because they are of course not double translations in the strict sense of the term as used so far, that is, they are not supposed to render one and the same Arabic word or phrase. The following 25 cases result from a cursory collation of Van Riet’s critical apparatus with the Arabic text and the Latin manuscripts *P* and *R* and may be amplified by further evidence based on a systematic comparison of the testimonies (especially additional Arabic manuscripts)²¹.

²¹ Additionally, I took into consideration the variant readings of the Arabic text noted by A. BERTOLACCI, *The Reception of Aristotle’s Metaphysics in Avicenna’s Kitāb al-Šifā’*. *A Milestone of Western Metaphysical Thought*, Brill, Leiden - Boston 2006 (Islamic Philosophy Theology and Science. Texts and Studies, vol. 63), pp. 483-558. In the following list of examples, I give first page and

[1] 25.62 [A 22.7] post *DFNV* = ba'da ṣM: ante *PR* = qabla *codd. cett., ed.*

[2] 26.81 [A 23.4] scilicet *DFNV* = fort. a'nī (cf. VAN RIET, *Lexiques*²², pp. 86, 311): sicut *PR* = ka-mā *codd., ed.*

[3] 53.30 [A 46ult.] vel *DFNV* = fort. wa-immā: si vero *PR* = wa-in *codd., ed.*

[4] 74.80 [A 64ult.] continuitatem terminatam, sive sit in sculptione, sive in materia plana *DFNV* = ittiṣālun maḥdūdun kāna fī naqšin aw fī māddatin ḠṢM: continuitatem terminatam, sive sit in anima (in anima *PR*, alia lectio in anima *F*¹), sive in materia *PR* = ittiṣālun maḥdūdun kāna fī nafsīn aw fī māddatin *P117 P125 L Ṭ*: ittiṣālun maḥdūdun muqaddarun kāna fī naqšin aw fī māddatin *B, ed.* (cf. BERTOLACCI, *Reception*, p. 496).

None of the Latin versions confirms the reading attested in ms. *B* and reproduced in the Cairo edition. The four manuscripts Van Riet relied on read *in sculptione* which corresponds to *fī naqšin* as attested in mss. ḠṢM and add — without correspondence in the Arabic — *plana* after *materia*, obviously in order to explain how *sculptio*, which is of course also a material entity, differs from *materia*. Mss. *P* and *R* (and a later addition in manuscript *F*) read *in anima*, which corresponds to *fī nafsīn* as transmitted in three other Arabic manuscripts and the Tehrān lithograph. On the one hand, this suggests that none of the two competing translations has been prepared without recourse to the Arabic text (a Latin reader having in front of him the wording edited by Van Riet scarcely would be thinking of replacing the word *sculptione* through the word *anima* and deleting *plana* at the end of the phrase; and the same holds true all the more the other way around). On the other hand, we cannot infer from this fact that the person who changed the text either in this or in that direction used another Arabic manuscript than the person who prepared the first translation, because either of the competing translations might be derived from one and the same undotted Arabic manuscript (with *nafs* and *naqš* looking alike). We even cannot infer that two different persons have been at work, as the translator may have collated his first draft once again against the Arabic text and then come to the decision to interpret the undotted Arabic word differently from his first interpretation.

line numbers of the Latin edition by Van Riet, then between square brackets the reference to the Cairo edition. The abbreviation '*ed.*' indicates which of the competing Arabic readings was adopted by the editors of the Cairo edition. The Arabic manuscripts are referred to by the sigla used by Bertolacci and in the Cairo edition. My own retro-versions of Latin readings without correspondence in the extant Arabic manuscript are marked by '*fort.*'. In all 25 cases, Van Riet follows the wording transmitted in mss. *DFNV*.

²² S. VAN RIET, *Avicenna Latinus. Liber de philosophia prima sive scientia divina I-X. Lexiques*, Peeters, Louvain-la-Neuve 1983.

[5] 86.18 [A 75.3] praecederet *DFNV* = *fort.* yataqaddamu (cf. VAN RIET, *Lexiques*, p. 288): constituitur *PR* = yataqawwamu *codd.*, *ed.* (see also case [6] and *ed.* Van Riet, *app. crit.* ad 141.44 = A 127.12 with the same confusion).

[6] 20-87.19 [A 75.4] quod praecederet non habens terminum *DFNV* = *fort.* mā huwa mutaqaaddimun bi-annahū lā ḥadda lahū (for *terminus* = ḥaddun cf. VAN RIET, *Lexiques*, p. 331): quod constituta est non habens partem *PRF*¹ = mā huwa mutaqaawwamun bi-annahū lā ḡuz' a lahū BĠDṢṬ: mā huwa mutaqaawwamun bi-annahū lā ḥayyiza lahū *M*, *ed.*

As in case [4], the sources attest three different readings. The three variant readings *ḥadd*, *ḥayyiz* and *ḡuz'* may be easily confused in an Arabic handwriting without diacritical points. The wording of ms. *M*, accepted in the Cairo edition, is not confirmed by the two Latin versions. Unlike case [4], the version attested by mss. *DFNV* and edited by Van Riet is not supported by the six manuscripts used for the Cairo edition. In all likelihood it is based on the readings *mutaqaaddim* instead of *mutaqaawwam* and *ḥadd* instead of *ḥayyiz* or *ḡuz'* (I doubt that *terminus* translates also *ḥayyiz* as accepted by VAN RIET, *Lexiques*, pp. 33, 331; in most cases, this correspondence will be due to the reading *ḥadd* instead of *ḥayyiz*). The text transmitted in mss. *P* and *R* (and, by a later hand, in *F*) corresponds with the remaining five Arabic manuscripts. Again, both Latin versions must have been prepared through recourse to the Arabic text and certainly do not originate from an intralingual revision.

[7] 87.28 [A 75.10] in sua existentia *DFNV* = *fort.* fī qiwāmihi (cf. VAN RIET, *Lexiques*, pp. 108, 219): in sua potentia *PR* = fī quwwatihi *codd.*, *ed.*

[8] 99.62 [A 86.3] duarum causarum *DFNV* = *fort.* sababayni: duarum rerum *PR* = šay' ayni *codd.*, *ed.*

[9] 11-101.10 [A 14-88.13] forma per seipsam habeat esse in potentia *DFNV* = [inna] l-ṣūrata bi-nafsihā mawḡūdatun bi-l-quwwati *M*: forma per se semper (per se semper *P*: semper per se *R*) habeat esse in potentia *PR* = [inna] l-ṣūrata bi-nafsihā mawḡūdatun bi-l-quwwati dā'iman *codd. cett.*, *ed.*

The different positions of 'semper' (= dā'iman) in *P* and *R* possibly point to a marginal addition of the word in the original translation which was done on the basis of an Arabic manuscript omitting dā'iman (like ms. *M*) and revised on the basis of an Arabic manuscript transmitting dā'iman correctly.

[10] 45-115.43 [A 105.4] prius autem imaginamus multitudinem et prius intelligimus unitatem, sed unitatem intelligimus absque principio intelligibili

ad imaginandum eam (incipientes eam formare in intellectu *add. F*¹) *DFNV* = lākinna l-kaṭrata nataḥayyaluhā awwalan wa-l-waḥdata na'qiluhā awwalan wa-l-waḥdatu na'qiluhā min ḡayri mabda'in li-taṣawwurihā 'aqliyyin ḠDṢṬ: prius autem imaginamur multitudinem sed unitatem intelligimus non incipientes eam formare in intellectu *PR* = lākinna l-kaṭrata nataḥayyaluhā awwalan wa-l-waḥdatu na'qiluhā min ḡayri mabda'in li-taṣawwurihā 'aqliyyin *BM, ed.*

This case provides strong evidence for the assumption that certain passages were translated independently a second time, and this on the basis of another Arabic manuscript. The Latin manuscripts *P* and *R* provide an independent translation of this section, as becomes clear from the change of word classes and the completely different syntactic structure of the final phrase which renders Arabic *min ḡayri mabda'in li-taṣawwurihā 'aqliyyin* (= non incipientes eam formare in intellectu) more fluently and elegantly than the almost literal translation in mss. *DFNV* (again, a later hand added in ms. *F* the version of *PR*, omitting 'non'). What is most conspicuous is the omission of *wa-l-waḥdata na'qiluhā awwalan* in mss. *BM* and the absence of a corresponding Latin phrase in *PR*. This omission can be reasonably explained through the assumption of a *saut du même au même* in the Arabic text (*awwalan ... awwalan*), whereas it cannot have been caused — due to the different word order in the Latin text — by a *saut du même au même* within the Latin tradition. Taking into consideration that this fact correlates with the actual findings in the Arabic manuscripts and simultaneously coincides with the evidence of a new, independent translation of the final part of the sentence, the probability of an occasional use of different Arabic manuscripts is relatively high.

[11] 120.24 [A 108.8] eo quod *DFNV* = id ḠDṢṬ: tunc *PR* = fort. idan: idā *BM, ed.*

The version transmitted in *PR* is based on interpreting Ar. *idā* ('if') in the sense of *idan* ('then'). The two Arabic words are easily confused. As in the preceding case, the version of *PR* correlates with the Arabic mss. *BM* as opposed to the other Latin version corresponding with the remaining Arabic testimonies.

[12] 175.50 [A 153.15] comparatione *DFNV* = fort. bi-l-qiyās (cf. VAN RIET, *Lexiques*, p. 182): per dextrum *PRF*¹ ≈ bi-l-tayāmun *codd., ed.*

[13] 185.24 [A 164.2] principio *DFNV* = fort. al-mabda': motori *PR* = al-muḥarrik *codd., ed.*: al-mutaḥarrik *DT*.

[14] 188.83 [A 166.6] igitur possibilitas rem essendi per causam *DFNV* = fort. fa-yakūnu imkānu kawnihī 'ani l-'illati: comparatio igitur possibilitatis rem essendi per causam *PR* = fa-takūnu nisbatu imkāni kawnihī 'ani l-'illati *P117 L T*: fa-takūnu nisbatu *P125*: fa-takūnu nisbatu kawnihī 'ani l-'illati *codd. cett., ed.* (cf. BERTOLACCI, *Reception*, p. 508)

[15] 249.67 [A 215.15] sensibilitas *DFNV* = ḥiss *codd.*, *ed.* : singularitas *PR* = *fort.* ḡuz' iyyun .

[16] 263.21 [A 226.11] naturam generis *DFNV* = ṭabī'at al-ḡins *codd.*, *ed.* : naturam corporis *PR* = *fort.* ṭabī'at al-ḡism.

[17] 297.31-32 [A 261.15] res cui acquisita est inceptio *DFNV* = al-šay' qad ḥašala lahu l-ḥudūt *codd.*, *ed.* : res cui assignata est inceptio *PR* = *fort.* al-šay' qad ḡu'ila lahu l-ḥudūt (*cf.* assignemus ... differentiam 247.13 = naḡ'alu bayānanā A 213.14, assignatur 277.13 = ḡu'ila A 247.2²³).

[18] 301.6 [A 264.12] pater etiam *DFNV* ≈ wa-ammā l-abu *codd.*, *ed.* : generatum (*ex generator* ?) enim *PR* = *an* wa-ammā kā' inun ?

[19] 314.89 [A 274.5] possumus mittere manus nostras *DFNV* = nudḥilu aydaynā *codd.*, *ed.* : possumus calefacere manus nostras *PR* = *fort.* nusahḥinu aydaynā (*cf.* VAN RIET, *Lexiques*, pp. 54, 173).

[20] 340.66 [A 295.10] perventione eius *DFNV* = ma'a ntiḥā'ihā *codd.*, *ed.* : per unionem eius *PR* = *an* ma'a ttiḥādihā ? (*cf.* VAN RIET, *Lexiques*, pp. 142, 336).

[21] 380.92 [A 330.7] aqueitatis *DFNV* = al-mā' iyya *codd.*, *ed.* : quidditatis *PR* = *fort.* al-māhiyya.

[22] 426.50 [A 365.4] de universitate ... intellectuum *DFNV* = min ḡumlat ... al-ma'qūlāt *codd.*, *ed.* : de singularitate ... intellectuum *PR* = *fort.* min ḡuz' iyyat ... al-ma'qūlāt.

[23] 431.55 [A 368.16] quemadmodum convenit ei *DFNV* = 'alā mā yaḡibu lahū *codd.*, *ed.* : quemadmodum congruit ei *PR* = *fort.* 'alā mā yuḥaqqu lahū (*vel* yaḥuqqu 'alayhi; 'alayhi *pro* lahū *ms. D*) (*cf.* congruit enim nobis 107.66 = fa-innahū yaḥuqqu 'alaynā A 95.15).

[24] 502.00 [A 420.4] ex duabus causis *DFNV* = min sababayni *codd.*, *ed.* : in duabus causis *PR* = *fort.* fī sababayni.

[25] 512.9 [A 426ult.] degustemus aliquid *DFNV* = ṭāla'nā šay'an *codd.*, *ed.* : deiecerimus aliquid *PR* = *an* aṭlaqnā/ṭallaqnā šay'an ?

²³ For assignare = ḡa'ala see also VAN RIET, *Avicenna Latinus. Liber de anima seu sextus de naturalibus I-II-III cit.*, pp. 302, 390.

None of the above 25 cases taken by itself proves in an incontestable way that the Latin translator(s) had recourse to more than one Arabic manuscript. However, the collected evidence taken as a whole points in this direction and leaves little doubt that in addition to the above considered reasons for double translations and terminological and stylistic reworkings by later revisers a third category of double translations must be taken into account, namely a partial or cursory revision based on (possibly even provoked by getting access to) a second Arabic manuscript.

Most of these competing Latin translations may trace back to different interpretations of one and the same unclear or unpunctuated Arabic manuscript due to the translator's changing understanding of the (con)text in the course of a revision of his first draft or due to the fact that different translators/revisers interpreted the same manuscript in different ways. Nevertheless, some others undoubtedly reflect two scarcely confusable variant readings, which either occurred in different Arabic manuscripts or in a manuscript with marginal or interlinear corrections (which as such represents also distinct manuscript branches, albeit indirectly). Examples of this latter type are found in cases [1], [2], [7], [9], [10], [14]. In seven cases the competing Latin versions coincide with variant Arabic readings attested in the manuscripts and taken into account in the Cairo edition and in Amos Bertolacci's collation²⁴. However, the correspondences provide no clear-cut result as to possible dependencies of the versions. The correlations displayed are as follows:

Case no.	Arabic mss. corresponding with version PR(F ¹)	Arabic mss. corresponding with version DFNV
[1]	B Ġ D Ṭ	Ş M
[4]	P117 P125 L Ṭ	Ġ Ş M
[6]	B Ġ D Ş Ṭ	—
[9]	B Ġ D Ş Ṭ	M
[10]	B M	Ġ D Ş Ṭ
[11]	B M	Ġ D Ş Ṭ
[14]	P117 L Ṭ	—

4. CONCLUSIONS

(1) The *Vaticanus latinus* 4428 (R) and the *Parisinus latinus* 6443 (P) show that the double translations do not come to an end with Book IV of Ibn Sīnā's *Metaphysics* of the *K. al-Šifā'* as maintained by Van Riet. Tentatively, we may state that variant

²⁴ Cf. note 21.

translations transmitted in *PR* to the exclusion of *DFNV* tend to render the relevant Arabic word or phrase less appropriately than the competing version.

(2) A number of double translations in these two manuscripts (not including what I called ‘false’ double translations in the last section) is transmitted in the main body of text interlinked through *vel*, which proves that the joint transmission of the competing translations is already attested for the 13th century, that is for the period of time from which the oldest extant manuscripts date. On the other hand, in the vast majority of double translations we find consistently only one of the two competing translations attested in either branch of manuscripts. In my view, this suggests the existence of one authoritative version which served simultaneously as common hyparchetype of all extant manuscripts and in which the two competing translations were clearly set apart, probably by presenting one translation *in textu*, the other one in the margins or between the lines. Otherwise, one should expect to find much more occurrences of an interlinked transmission of the double translations in both branches. As a matter of fact, the very same conclusion was reached by Jules Janssens on the basis of his examination of the double translations in Ibn Sīnā’s *Physics*. However, this conclusion does not provide any hint as to the question whether this authoritative version or hyparchetype was the translator’s original or a 13th century revision authored by somebody else.

(3) The vast majority of ‘real’ double translations consists of mere stylistic and terminological retouchings which do not require a fresh recourse to the Arabic text and may have been applied by the translator himself or by a later reviser as well.

(4) In a number of cases spread over the entire text of the *Ilāhiyyāt* we find what I called ‘false’ double translations. Unlike the preceding cases, we are faced here with alternative translations both of which definitely prepared by consulting the Arabic text, in some cases probably due to different interpretations of one and the same Arabic manuscript, in other cases — as it seems — on the basis of different Arabic manuscripts. These cases must be carefully kept apart from the ‘real’ double translations, because the two types of double translations may have entirely different causes or histories. The question, how they are related to each other and whether they support the theory of One Authorial Recension or rather the hypothesis of Multiple Recensions by different revisers can only be answered on the basis of a careful stemmatic analysis of the extant Latin manuscripts. What is clear, however, is the fact that not all variant translations trace back to only one integrative act or process of translation so as if made from one piece. This brings me finally back to what I proposed at the outset, namely that a complementary combination of the two conflicting theories, expanded by admitting also the translation technique of hendiadys as a possible explanation, might come near to the truth.

ABSTRACT

Double Translations in the Latin Version of the Metaphysics of Avicenna's Kitāb al-Šifā'

Among the touchstones of any critical edition of medieval Graeco-Latin and Arabo-Latin translations is the phenomenon of double translations (*leçons doubles*). In the first part of the present article, I deal in general with the nature and delimitation of the phenomenon in Arabo-Latin translations as well as with recent attempts at historical and philological explanations of its emergence. The second part analyses various types of double translations in the Latin version of Avicenna's Metaphysics of the *K. al-Šifā'* and provides some observations on their different causes.

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ALFONSO QUARTUCCI

**Avicenna's Notion of *al-mawḍū* 'al-awwal' ('first subject')
in *Ilāhiyyāt*, I, 1-2 and its Latin Reception***

An investigation of the reception of Avicenna's thought in the Latin speaking world requires as an essential part an analysis of the Latin translation of his works. On one hand, the original Arabic text cannot be overlooked in order to get a picture of Avicenna's philosophical views; on the other, their influence on Latin philosophy has to be evaluated by considering the text actually read by Latin authors. A comparison between the Arabic and the Latin texts shows that, far from being a meaningless *medium*, the Latin translation is a key event in the history of medieval philosophy with a proper doctrinal significance. While allowing Avicenna's thought to reach the Latin speaking world, the translation determines the way in which it could be understood by Latin authors and, negatively, what could not be grasped at all by them — both because of the limited amount of translated texts and because of the discrepancies between passages of the available translations and the corresponding Arabic texts. This picture is further complicated by the well known phenomenon of 'double translations' concerning single words or phrases of Avicenna's texts. In order to distinguish the different phenomena usually subsumed under the label 'double translations', Rüdiger Arnzen has applied the term in a strict sense to «the phenomenon in which the manuscripts of an Arabo-Latin translation display two synonymous or semantically closely related Latin words or phrases rendering one and the same Arabic word or phrase at one and same place of the text in question»¹. This phenomenon is to be distinguished from the one Arnzen characterizes as 'false double translations', namely double translations which «are not supposed to

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¹ R. ARNZEN, *Double Translations in the Latin Version of the Metaphysics of Avicenna's Kitāb al-Šifā*, in this volume.

render one and the same Arabic word or phrase»². As one can expect, it is this last phenomenon which deserves special attention when dealing with the reception of Avicenna's works from a doctrinal point of view. Indeed, in the case of proper double translations the same meaning is conveyed by the two alternative texts. On the other hand, the alternative texts resulting from 'false double translations' are in principle semantically different. In this case, the reception of Avicenna's doctrines depends on which text was actually read by each Latin author.

In this paper, I will focus on the Latin reception of the Avicennian notion of 'first subject' as it is found in two passages belonging to the first and the second chapter of the first treatise, respectively, of the metaphysical section (*Ilāhiyyāt*) of Avicenna's *Book of the Cure* (*Kitāb al-Šifā'*). As it will become clear, the exact meaning of the expression 'first subject' could not be fully appreciated by Latin authors because of the lack of translation of other relevant parts of the *Book of the Cure*. This notwithstanding, some authors were able to see the main idea behind Avicenna's usage of the expression. An accurate evaluation of the Latin reception of the Avicennian notion has also to take into account the presence of a case of 'false double translations' in one of the two passages.

The paper will fall into two main parts. In the first part, I will try to establish the exact meaning of the expression 'first subject' in *Ilāhiyyāt*, I, 1-2, which to my knowledge has so far been overlooked by scholarship. Firstly, I will introduce the two passages where the expression occurs and place them in their textual, historical and doctrinal context. Secondly, I will provide an interpretation of the expression 'first subject' which justifies its two occurrences in the passages.

In the second part, I will move to the Latin reception proper. After examining the Latin translation, I will focus on the reception of the Avicennian notion³ of 'first subject' in Albert the Great and John Duns Scotus.

I. A NEW EPISTEMOLOGICAL NOTION: AVICENNA ON 'FIRST SUBJECT'

As is well known, in several passages of the *Metaphysics* Aristotle describes in different ways what he calls 'first philosophy' or 'wisdom': it should be the science of first causes and principles; it should be the science of being *qua* being; finally, it should be the science of immaterial beings. The presence of these different perspectives emerging from the *Metaphysics* becomes straightforwardly problematic when one contrasts it with the strict criteria imposed on scientific

² See the examples of both phenomena provided in ARNZEN, *Double Translations* cit.

³ The reception of a notion has to be distinguished from the reception of the expression which conveys it, insofar as the same notion may be conveyed by new expressions and – conversely – an expression can be deprived of its original meaning. As will be clear, it is the reception of the Avicennian notion of 'first subject' which I am mainly interested in here.

sylogism by Aristotle himself in his *Posterior Analytics*. Here Aristotle maintains that a demonstration is made up of three elements: 1) what is demonstrated, namely the inference *per se* of an accident to something else; 2) the axioms, which are the principles of demonstration; 3) the subject genus, whose *per se* accidents are demonstrated (*An. Post.*, A, 7). It is not possible for a demonstration to move from one genus to another one (*An. Post.*, A, 7). Moreover, the unity of a whole science (in other words: the unity of a set of demonstrations) depends itself on the unity of the genus it is about (*An. Post.*, A, 28), namely the subject genus of their demonstrations, which would be later called simply 'subject' of the science⁴.

This being the case, the question arises as to how to identify the subject of metaphysics. The great relevance of this problem in 13th- and 14th-century Latin philosophy and the new understanding(s) of metaphysics originating from its solution(s) allowed scholars to speak about a 'second beginning of metaphysics'⁵. More recently, however, it has been shown that the actual turning-point in the history of philosophy, as far as the epistemological foundation of metaphysics is concerned, is to be identified with Avicenna's *Ilāhiyyāt*⁶. As far as the question of the subject of metaphysics is concerned, it has been shown that Avicenna goes far beyond his predecessors in employing a rigorous notion of 'subject' which observes the principles emerging from the *Posterior Analytics*. In particular, even though al-Fārābī had already applied to metaphysics the epistemological notion of 'subject', he seems to use it as generally referring to anything falling within the consideration of metaphysics⁷:

⁴ For example, see the Arabic and Latin authors quoted below. Speaking of the 'subject' of science becomes common in Arabic and Latin medieval philosophy, but the expression is already employed by Alexander of Aphrodisias. See ALEX. APHR., *In Aristotelis Metaphysica commentaria*, ed. M. HAYDUCK, Reimer, Berlin 1891, *passim* (for example, p. 239, lin. 24; p. 258, lin. 9).

⁵ L. HONNEFELDER, *Der Zweite Anfang der Metaphysik. Voraussetzungen, Ansätze und Folgen der Wiederbegründung der Metaphysik im 13./14. Jahrhundert*, in J. P. BECKMANN, L. HONNEFELDER, G. SCHRIMPF, G. WIELAND eds., *Philosophie im Mittelalter. Entwicklungslinien und Paradigmen*, Meiner, Hamburg 1987, pp. 155-186. See also the introduction of Id., *Scientia transcendens. Die formale Bestimmung der Seiendheit und Realität in der Metaphysik des Mittelalters und der Neuzeit (Duns Scotus - Suárez - Wolff - Kant - Peirce)*, Meiner, Hamburg 1990. For an overview of the several positions about the subject of metaphysics (especially from the point of view of the relation between God and the subject of metaphysics), see A. ZIMMERMANN, *Ontologie oder Metaphysik? Die Diskussion über den Gegenstand der Metaphysik im 13. und 14. Jahrhundert. Texte und Untersuchungen*, Peeters, Leuven 1998.

⁶ A. BERTOLACCI, *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā'. A Milestone of Western Metaphysical Thought*, Brill, Leiden - Boston 2006. Subsequent scholarship has acknowledged that speaking of a 'second beginning of metaphysics' would be more appropriate with respect to Avicenna's *Ilāhiyyāt* than with respect to Latin medieval philosophy: see J. A. AERTSEN, *Medieval Philosophy as Transcendental Thought. From Philip the Chancellor (ca. 1225) to Francisco Suárez*, Brill, Leiden - Boston 2012, pp. 75-76. Previous scholarship had already indicated Avicenna as one of the main sources of the discussion about the subject of metaphysics in Latin medieval philosophy: see ZIMMERMANN, *Ontologie oder Metaphysik?* cit., pp. 144-152.

⁷ For a comparison between al-Fārābī's and Avicenna's usage of the notion of 'subject' see BERTOLACCI, *The Reception* cit., pp. 145-146.

AL-FĀRĀBĪ, *On the goals of the Sage in each treatise of the book named by means of letters* (Fī aġrād al-ḥakīm fī kull maqāla min al-kitāb al-mawsūm bi-l-ḥurūf)⁸

«Of the subjects of this science, on the other hand, some have no existence at all (be it imaginary or real) in natural things. It is not that imagination has abstracted them from natural things; rather, their existence and nature [itself] is abstracted [i. e. immaterial]. Others exist in natural things, even though they are imagined as abstracted from them. However, they do not exist in natural things essentially, i. e. in such a way that their existence is not independent from these and they are things whose subsistence is due to natural things. Rather, they exist both in natural things and in non-natural things (these latter being separate either really or in imagination). Therefore the science which deserves to be called by this name is [only] the present one. It alone, all other excluded, is 'metaphysics'.

The first subject of this science is the absolute existent and what is equivalent to it in universality, namely the one ».

In other words, while dismissing al-Kindī's merely theological conception of metaphysics, al-Fārābī states that *both* immaterial realities *and* realities not depending essentially on physical things are 'subjects' (in the plural) of metaphysics. Among these subjects, he singles out the absolute existent (and the one, since it is as common as the existent), labelling it as 'the first subject' of metaphysics⁹.

On the contrary, Avicenna clearly states that the existent *qua* existent is *the* subject of metaphysics (in the singular), in line with the principle according to which the subject of a science can only be one. In this respect, the titles of the first two chapters of Avicenna's *Ilāhiyyāt* are themselves telling: 'On the beginning of the research of the subject of first philosophy' (T. I, c. 1); 'On attaining the subject of this science' (T. I, c. 2). Moreover, while dividing the theoretical sciences, Avicenna recalls what *the* subject of physics is and what *the* subject of mathematics is. When he comes to metaphysics, he says:

Ilāhiyyāt I 1 (p. 4, lin. 14; p. 5, lin. 1-4)¹⁰

«And [it has been mentioned] that the divine [sciences] examine the things which are separated from matter in [their] subsistence and definition [...] But it

⁸ Bertolacci's translation, in BERTOLACCI, *The Reception* cit., p. 69 (in order to be consistent about the basic expressions dealt with in this paper, I have replaced the words 'subject-matter' (*mawḍū'*) and 'primary' (*awwal*) with 'subject' and 'first', respectively).

⁹ See BERTOLACCI, *The Reception* cit., chapters 2-3.

¹⁰ Translations are mine unless otherwise indicated. Translations of passages of Avicenna's *Ilāhiyyāt* are based on AVICENNA, *Al-Šifā'*, *al-Ilāhiyyāt* (1), edd. Ğ. Š. QANAWATĪ, S. ZĀYID, al-Hay'a al-'amma li-šū'ūn al-maṭābi' al-amīriyya, Cairo 1960. For translations of Avicenna's *Ilāhiyyāt* see also AVICENNA, *The Metaphysics of The Healing. A parallel English-Arabic text translated, introduced and annotated by Michael E. Marmura*, Brigham Young University Press, Provo, Utah 2005. For the translation of this passage see also BERTOLACCI, *The Reception* cit., pp. 118-119.

did not become clear to you from this which the subject of metaphysics really is, except for an indication taking place in the *Book of Demonstration of Logic*, if you remember it. This is the fact that in all the other sciences you have a thing which is a subject (šay'un huwa mawḍū'un), some things which are the things sought, and assumed principles from which the demonstrations are composed».

The text is interesting because Avicenna recalls as something already established that metaphysics enquires into things separated from matter in their subsistence and definition. These include both the kinds of realities which al-Fārābī had distinguished and labelled as 'subjects' of metaphysics. In the second sentence, however, Avicenna declares that it is not clear what the subject of metaphysics is. This means that being enquired into by a science does not imply being a subject of that science: something more is required in order to single out the subject of a science from among the things examined in it. Moreover, Avicenna explicitly refers to the three elements of demonstration distinguished in the *Posterior Analytics* and speaks of the 'subject' in the singular. The observance of the *Posterior Analytics* criterion concerning the uniqueness of the subject is undeniable when one turns to *Ilāhiyyāt*, I, 2, where Avicenna establishes that the existent *qua* existent is the subject of metaphysics¹¹.

However, twice in the first two chapters of his *Ilāhiyyāt*, Avicenna refers to the existent *qua* existent through the expression 'first subject'. This is problematic insofar as there is no evident reason why Avicenna should use the expression 'first subject' rather than 'subject'. The next section will introduce and discuss the relevant texts in detail.

I. 1. *The basic texts*

The first passage where the expression 'first subject' occurs is found at the end of the first chapter of the first treatise. After having ruled out the possibility that God be the subject of metaphysics, Avicenna discusses whether the four ultimate causes can. In order to rule out also this possibility, Avicenna distinguishes four ways in which the causes could be investigated: (1) inasmuch as they are existent; (2) inasmuch as they are causes *simpliciter*; (3) inasmuch as each one of them has a proper way of being; (4) inasmuch as they make up

¹¹ For Avicenna's discussion about the subject of metaphysics see BERTOLACCI, *The Reception* cit., chapter 4, especially pp. 118-126. For the principle concerning the uniqueness of the subject, its background in Aristotle and its role in Avicenna, see A. BERTOLACCI, *Avicenna and Averroes on the proof of God's existence and the subject-matter of metaphysics*, « Medioevo », 33, 2007, pp. 61-97. Bertolacci observes (p. 74) that the influence of the principle on Avicenna is clear, even though it is never explicitly mentioned by him.

a totality. Avicenna goes on to show that the causes cannot be the subject of metaphysics according to an investigation of kinds (2) - (3) - (4). As for the only kind of investigation left, namely (1), Avicenna states:

(T1) *Ilāhiyyāt*, I, 1 (p. 9, lin. 6-8)

«As for the possibility that the investigation concerns the causes inasmuch as they are existent and concerns what attaches to them in that respect, then it would be necessary that the first subject (*al-mawḍūʿ al-awwal*) be the existent inasmuch as it is existent».

Hence the conclusion is drawn that the view according to which the causes are the subject of metaphysics is false.

Two remarks on this text are in order. Firstly, Avicenna speaks about the 'first subject', not the 'first subject of metaphysics': one should not immediately identify the two expressions. However, Avicenna is trying to show that the ultimate causes cannot be the subject of metaphysics, so that, in order for the proof to make sense, the expression 'first subject' must refer, at least indirectly, to the subject of metaphysics.

Secondly, albeit Avicenna's argument is not completely explicit, the implicit premise which makes it sound is easily found, once it is assumed that the expression 'first subject' refers somehow here to the subject of metaphysics. This implicit premise is the principle, originating from the *Posterior Analytics*, according to which the task of a science consists in demonstrating the inherence of a *per se* accident to its (i. e. the science's) subject. Accordingly, if metaphysics proves the *per se* accidents of the causes from the point of view of their being existent, the actual subject of metaphysics (whose *per se* accidents metaphysics is actually proving) should be the existent *qua* existent. This would be a satisfactory explanation of Avicenna's line of reasoning; however, it does not explain why Avicenna should use the expression 'first subject' rather than 'subject' in the quoted text.

The second occurrence of the expression 'first subject' is found in the second chapter of the first treatise. In this chapter, Avicenna establishes that the existent *qua* existent is the subject of metaphysics. He comes to this conclusion through two main arguments, which can be roughly summarized thus: (1) an examination of the subjects of particular sciences inasmuch as they are existent, as well as of non-sensible realities, is necessary; this examination must belong to the science of what is separated from matter (namely, to metaphysics); there is nothing common to all of them, so that they all are its states (*ḥalāt*) and accidents (*ʿawāriḍ*), but the existent; (2) an examination of the common notions employed by the particular sciences is necessary; no particular science carries out this task; these notions cannot be accidents (*ʿawāriḍ*) of anything but of the existent.

After having drawn the conclusion according to which the existent *qua* existent is the subject of metaphysics, however, Avicenna adds a further argument which confirms that the existent can be the subject of metaphysics: (3) there is no need to ascertain the quiddity of the existent and to establish its existence, in which case another science should take this task on. Hence Avicenna states again his conclusion as follows:

(T2) *Ilāhiyyāt*, I, 2 (p. 13, lin. 12-19)

« [a] Therefore the first subject (*al-mawḍū* 'al-*awwal*) of this science is the existent inasmuch as it is existent and [b] the things sought by it [i. e. this science] are the things which attach to it [i. e. the existent] inasmuch as it is existent, unconditionally.

[c] Some of these things¹² are like its species, such as substance, quantity and quality. [c₁] Indeed, in order to be divided into them, the existent does not need any division prior to them, as [on the contrary] substance needs some divisions in order that the division into man and not-man follows it necessarily.

[d] And some of these are like its¹³ proper accidents, such as the one and the many, potency and act, the universal and the particular, the possible and the necessary. [d₁] Indeed, in order to receive these accidents and to be prepared for them, the existent does not need to be specified as natural, mathematical, ethical or something else ».

In this second passage, the expression 'first subject' is explicitly qualified as 'first subject of this science', namely of metaphysics. If we assume that the expression 'first subject' must mean the same in the two passages, its occurrence in *Ilāhiyyāt*, I, 2 confirms that also in *Ilāhiyyāt*, I, 1 it must refer to the subject of metaphysics.

Beside the first subject, mention is made in the text of the things sought in metaphysics: they are the things which attach to the existent *qua* existent unconditionally. These are of two different kinds: some of them are the Aristotelian categories, which are like species with respect to the existent; some others are like proper accidents with respect to the existent.

As in the case of (T1), the mention of the 'subject' in (T2) can be accounted for on the basis of principles originating from the *Posterior Analytics*, which allow us to explain the link between (T2 a), on the one hand, and what precedes and what follows it, on the other. The link with what precedes is ensured by the principle according to which a science cannot demonstrate about its subject 'that it is' and

¹² Reading *hāḍihi l-umūr*.

¹³ Bertolacci: *add. lahū* (BERTOLACCI, *The Reception* cit., p. 490).

‘what it is’; rather, a science only assumes the existence and the definition of its subject¹⁴. The link with what follows (T2 a) is due to the fact that the unity of the ‘subject genus’ of a science extends to its parts as well as to its accidents¹⁵. As in the case of (T1), however, there is no obvious reason why Avicenna should use the expression ‘first subject’ rather than ‘subject’.

All the Arabic manuscripts I was able to consult¹⁶ display no textual variant as far as the expression ‘first subject’ in both (T1) and (T2) is concerned. The only clue of a textual variant I know of until now is found in the Latin translation of (T1). In particular, a case of ‘false double translations’ corresponds to the expression ‘first subject’¹⁷:

<i>Edited Latin Text</i> (p. 8, lin. 49-52)	<i>Manuscript P</i> (Paris, Bibl. Nat., Lat. 6443)
Si autem consideratio de causis fuerit inquantum habent esse et de omni eo quod accidit eis secundum hunc modum, oportebit tunc ut ens, inquantum est ens, sit subiectum, quod est convenientius.	Si autem consideratio de causis fuerit inquantum habent esse et de omni eo quod accidit eis secundum hunc modum, oportebit tunc ut ens, inquantum est ens, sit subiectum primum.

The Latin text witnessed by manuscript P corresponds to the Arabic text (*subiectum primum* — *al-mawḍū‘ al-awwal*). On the other hand, the edited Latin text seems to translate *al-mawḍū‘ al-awlā*. Regarding ‘false double translations’, R. Arnzen has shown that some cases of « competing Latin translations may trace back to different interpretations of one and the same unclear or unpunctuated Arabic manuscript », while others « undoubtedly reflect two scarcely confusable variant readings, which either occurred in different Arabic manuscripts or in a manuscript with marginal or interlinear corrections ». The case dealt with here belongs to the first class, since *al-awwal* and *al-awlā* could be different interpretations of the same unclear Arabic word¹⁸. Anyway, even if one assumes the possible existence of an Arabic exemplar witnessing *al-awlā*, this would be

¹⁴ For the Aristotelian background of this principle and its application by Avicenna see BERTOLACCI, *Avicenna and Averroes* cit.

¹⁵ Cf. *An. Post.*, A, 28. See also text (v) in section I.2 below.

¹⁶ My check is based on the manuscripts available on October 2016 for the ERC project ‘Philosophy on the Border of Civilizations’, 2014-2019 (in progress), P. I. Amos Bertolacci.

¹⁷ AVICENNA LATINUS, *Liber de philosophia prima sive scientia divina*, I-IV, ed. S. VAN RIET, Peeters - Brill, Louvain - Leiden 1977. See Van Riet’s introduction (pp. 123*-138*) for details on the Latin translation and the distinction between ‘texte ancien’ and ‘texte revu’ concerning double translations (I shall rather speak about ‘edited Latin text’ and ‘text witnessed by manuscript P’).

¹⁸ Their *rasm* is similar, although not identical.

too little evidence against all the available manuscripts witnessing *al-awwal*¹⁹. Therefore, there is no reason to suspect that the Arabic text in (T1) or (T2) is not correct, unless further evidence is found.

This being the case, an explanation of the expression 'first subject' is required which is able to account for its occurrence in (T1) and (T2).

Aristotle never uses the expression 'first subject' (ὑποκείμενον πρῶτον) to refer to the subject genus in his *Posterior Analytics*; the expression is used — perhaps for the first time — by al-Fārābī, for example in his *Fī aḡrād*. Of course, it is undeniable that Avicenna inherits the expression 'first subject' from al-Fārābī. In his *Autobiography*, Avicenna himself states his dependence on the Farabian *Fī aḡrād*. Moreover, a comparison between the Farabian text and (T2) reveals a structural similarity between them: both mention (i) the existent as 'first subject' of metaphysics and (ii) the species as well as the accidents of the existent as things enquired into by metaphysics²⁰. Nonetheless, the dependence on al-Fārābī's *Fī aḡrād* does not make superfluous an explanation of the two occurrences of the expression in Avicenna's work, if one takes into consideration the different perspectives proper to the two authors. Al-Fārābī had spoken of several 'subjects' of metaphysics; consequently, it is reasonable that he uses an expression like 'first subject' in order to single out the absolute existent (and the one) as fundamental subject of metaphysics²¹. In other words, from the Farabian point of view, there is a real difference between saying that something is 'a subject' and saying that something is 'the first subject'. On the

¹⁹ To be more precise, three hypotheses are available to explain the present case of double translations. (1) Both the Latin translations trace back to the same Arabic word. The *rasm* is not clear. It is alternately read as *al-awwal* and as *al-awlā*. (2) Both the Latin translations trace back to the same Arabic word. The *rasm* is clear: الولي. It is alternately read as *al-awwalī* and as *al-awlā*. *Al-awwalī* is translated into Latin by *primum*. Cf. AVICENNA LATINUS, *De Anima seu Sextus de Naturalibus I-II-III*, ed. S. VAN RIET, Peeters - Brill, Louvain - Leiden 1972, p. 292; AVICENNA LATINUS, *Liber de Philosophia Prima sive Scientia Divina I-X. Lexiques par S. Van Riet*, Peeters - Brill, Louvain-La-Neuve - Leiden, 1983, p. 6. (3) The Latin translations trace back to Arabic variant readings: *al-awwal* and *al-awlā*.

²⁰ A proof of the dependence of Avicenna's *Ilāhiyyāt* on al-Fārābī's *Fī aḡrād* based on a comparison of several passages of the two works can be found in BERTOLACCI, *The Reception* cit., pp. 88-94. The text quoted above from al-Fārābī's *Fī aḡrād* does not include the mention of species and accidents as things enquired into by metaphysics; see the full translation in BERTOLACCI, *The Reception* cit., pp. 66-72, especially p. 69.

²¹ This is what could be said on account of al-Fārābī's *Fī aḡrād*. However, in a treatise devoted to the *Posterior Analytics*, al-Fārābī states that a science can have more than one 'first subject', which makes it doubtful that the expression 'first subject' is intended to work as said. For references to al-Fārābī's treatise and translations of relevant passages see H. EICHNER, *Al-Fārābī and Ibn Sīnā on 'Universal Science' and the System of Sciences: Evidence of the Arabic Tradition of the Posterior Analytics*, « Documenti e studi sulla tradizione filosofica medievale », 21, 2010, pp. 71-95. See the translation at pp. 79-80 (and compare it with the one at pp. 74-75: al-Fārābī seems to call 'first subject' what he elsewhere calls 'subject').

contrary, Avicenna speaks of the subject of a science in line with the principle of uniqueness of the subject. Even before any further consideration, it seems that, from the Avicennian point of view, there cannot be a real difference between the expressions 'subject of a science' and 'first subject of a science': they must refer to the same thing²². This is exactly what makes the two occurrences of the expression 'first subject' apparently out of place.

In abstract terms, I see three ways to answer the problem of providing an explanation of the expression 'first subject' in (T1) and (T2):

(A) the expression 'first subject' has no proper meaning; it is *only* due to al-Fārābī's influence on Avicenna;

(B) Avicenna uses the expression 'first subject' in a 'Farabian way', namely in order to single a 'first subject' out from a plurality of 'subjects';

(C) Avicenna uses the expression 'first subject' in order to make explicit a characteristic which the expression 'subject' does not — what may be called the 'firstness' of the subject of a science.

Answer (A) is not a real solution to the problem; rather, it simply states that the expression 'first subject' does not need any explanation in addition to Avicenna's dependence on al-Fārābī. With respect to this dependence, it ascribes a merely passive role to Avicenna as far as the reception of the expression 'first subject' is concerned, which would contrast with Avicenna's general attitude towards the philosophical tradition. Furthermore, answer (A) would also contrast with the large amount of references to the *Posterior Analytics* present in *Ilāhiyyāt*, I, 1-2, which suggests that Avicenna should speak according to a rigorous epistemological language²³. Consequently, answer (A) should be taken into consideration only if a real solution to the problem cannot be found at all.

Answer (B) contrasts with what has been said about Avicenna's endorsement of the uniqueness principle. However, answer (B) may become admissible under the hypothesis that Avicenna uses the word 'subject' in two different ways, namely in a strict sense (subject₁) and a loose one (subject₂). According to this hypothesis, subject₁ would be the notion commonly meant by Avicenna when speaking about the subject of a science, which can only be one. Subject₂, on the contrary, would refer to a plurality of things falling within the consideration of a science. The expression 'first subject' would then be synonymous with subject₁ and would be used by Avicenna in order to single subject₁ out from a plurality of subjects₂. If this is the case, one would expect to find some of the subjects₂ of metaphysics mentioned in (T1) and (T2), which would prompt Avicenna to use 'first subject' in these two texts — rather than the usual 'subject' — in order to refer to subject₁.

²² Cf. BERTOLACCI, *The Reception* cit., p. 146 n. 88.

²³ I owe this observation to Amos Bertolacci.

Answer (C) implies that the adjective 'first' has a definite semantical value inasmuch as it points to a property of the subject of a science. Consequently, a concrete example of answer (C) should establish what exactly this property amounts to and how it is linked to what is said in (T1) and (T2) – this link being the reason why 'first subject' is used rather than 'subject'.

In what follows, I provide two possible interpretations of the expression 'first subject'. The former is an example of answer (B); I call it 'Weak Interpretation'. The latter is an example of answer (C); I call it 'Strong Interpretation', inasmuch as it requires a more complex conceptual apparatus than the Weak Interpretation does. Although the Weak Interpretation could be preferred because of its simplicity, I will claim that it is not able to account for both (T1) and (T2) in a satisfactory way. On the other hand, the Strong Interpretation is able to account perfectly well for both (T1) and (T2); I believe it is the right interpretation of the expression 'first subject'.

1. 2. 'First subject' in Avicenna's Book of Demonstration I-III

Before moving to the interpretations proper, it is worth observing that an explicit explanation of the expression 'first subject' is not found in Avicenna's *Book of Demonstration*, I-III (roughly corresponding to Aristotle's *Posterior Analytics* A²⁴), even though the expression is used several times²⁵. The following list includes all the occurrences of the expression I have been able to find²⁶: (i) *Burhān*, II, 10; (ii) *Burhān*, III, 6; (iii) *Burhān*, III, 6; (iv) *Burhān*, III, 7; (v) *Burhān*, III, 8.

Texts (ii) and (iii) can be dismissed since the expression 'first subject' is not used there in a way relevant to present purposes²⁷. On the other hand, in texts (i), (iv) and (v) the expression seems to be used in a technical, epistemological meaning.

²⁴ For the correspondences between Avicenna's *Book of Demonstration* and Aristotle's *Posterior Analytics* see R. STROBINO, *Avicenna on the Indemonstrability of Definition*, « Documenti e studi sulla tradizione filosofica medievale », 21, 2010, pp. 113-163 (see Appendix 1, pp. 145-147). According to the table provided by Strobino, the first treatise of Avicenna's work includes topics dealt with by Aristotle in *Posterior Analytics*, B.

²⁵ I do not take into account only the exact phrase *al-mawḍū* 'al-awwal'; variants are included which are due to the following: presence/absence of the article; gender/number modifications; *awwal*/*awwalī* substitution.

²⁶ Occurrences of the expression in the same passage and with the same meaning are not listed separately.

²⁷ In text (ii), the expression is used twice while speaking about a series of predications: it has not a technical meaning; rather, it just points to the first of the subjects of the series. In text (iii), Avicenna states that substance is the first subject of the accidents *fi l-wuḡūd* (here opposed to *fi l-qawl*): therefore, the expression is here used to refer to the concrete *substratum* in which accidents inhere, this meaning not being directly linked to the doctrine of science.

(i) Avicenna states that Platonic forms cannot be the ‘first subjects’ of sciences²⁸. A feature of ‘first subjects’ is stated: sciences only enquire into the essential accidents of their first subjects. The word ‘only’ (*innamā*) may possibly refer to the fact that a science has to assume the essence as well as the existence of its subject²⁹. Anyway, none of what is said about ‘first subjects’ is enough to distinguish the notion of ‘first subject’ from the notion of ‘subject’.

(iv) Sciences are compared on the basis of their ‘first subjects’, but nothing is said about what a ‘first subject’ is.

(v) The text corresponds to Aristotle’s *Posterior Analytics*, A, 28, namely the chapter where Aristotle states that a science is one when it is about one genus. Without going into details, Aristotle seems to characterize the unity of the genus as extending to its parts as well as to the attributes of these parts³⁰. In his *Burhān*, Avicenna refers to the ‘first subject’ rather than to the genus:

Burhān, III, 8 (p. 247, lin. 3-5)

« Researches belong to one science only if they share in the first subject — the search [performed] in them being only about the essential accidents which belong to it [i. e. the first subject] or to its parts or to its species — and if they share in the first principles from which it is demonstrated that those essential accidents inhere to the first subject or to its parts or to its species ».

According to the text, the unity of a science is granted by its first subject and its first principles. Aristotle’s reference to the parts of the genus and their attributes is developed by Avicenna in a description of the full task of a science: it does not only demonstrate the essential accidents of its first subject, but also the essential accidents of the parts and of the species of its first subject.

To sum up, in his *Burhān* Avicenna never contrasts the expression ‘first subject’ with the expression ‘subject’. The first subject of a science is rather

²⁸ *Burhān*, II, 10 (p. 189, lin. 11-12): « They are not the primary (*awwaliyya*) subjects of these sciences either (so that their essential accidents would only be sought) ». Translations of passages of Avicenna’s *Burhān* are based on AVICENNA, *Al-Šifā’*, *al-Mantiq*, *al-Burhān*, ed. A. ‘Aḩīfī, al-Maṭba‘a al-amīriyya, Cairo 1956.

²⁹ As observed in BERTOLACCI, *The Reception* cit., p. 135, about a passage in *Burhān*, II, 6 (see below) where Avicenna simply speaks about ‘subjects’.

³⁰ *An. Post.*, A, 28, 87a38-39: Μία δ’ ἐπιστήμη ἐστὶν ἡ ἐνὸς γένους, ὅσα ἐκ τῶν πρώτων σύγκειται καὶ μέρη ἐστὶν ἢ πάθη τούτων καθ’ αὐτά. I take μέρη as referring to the parts/species of the genus and τούτων as referring to these parts. Cf. M. MIGNUCCI, *L’argomentazione dimostrativa in Aristotele. Commento agli ‘Analitici Secondi’*, I, Antenore, Padova 1975, pp. 574-576. For different interpretations see Barnes’ commentary in ARISTOTLE, *Posterior Analytics. Translated with a commentary by Jonathan Barnes*, Clarendon Press, Oxford 1993 (2nd ed.), pp. 190-191.

mentioned — in text (v) — along with its species and parts, on the one hand, and with the essential accidents demonstrated within that science, on the other.

I. 3. *Weak Interpretation*

As previously said, the main idea of the Weak Interpretation is to distinguish between two different meanings of the word 'subject': subject₁, to be identified with the meaning of 'first subject', and subject₂. This idea is based on the following fact: on the one hand, Avicenna endorses the principle stating the uniqueness of the subject; on the other, in his *Burhān* Avicenna sometimes speaks of 'subjects' of a science — in the plural. According to the Weak Interpretation, the uniqueness principle would concern subject₁, while subject₂ would be implied in the plural 'subjects'.

Most relevant in this respect are the very first sentences of *Burhān*, II, 6:

Burhān, II, 6 (p. 155, lin. 4-5, 8-9)³¹

« We say that each discipline — and especially the theoretical [ones] — has principles, subjects and questions.
[...]

The subjects are the things such that the discipline only examines the states relating to them and their essential accidents ».

While confirming that a science enquires into the essential accidents of its subject, the text allows for a plurality of subjects³². The possibility that a science has more than one subject is explicitly stated in a later passage from the same chapter:

Burhān, II, 6 (p. 157, lin. 5-13)

« We say that sometimes there is a single subject for the science, like number for arithmetics. But sometimes [the subject] is not single; rather, there are actually many subjects sharing in something by means of which they are unified. This [happens] in [several] ways: either they share in a genus, which is the thing by means of which there is unification [...] or they share in a continuous relation among them [...] or they share in one goal [...] or they share in one principle [...]. ».

³¹ See also the translation provided by Bertolacci in BERTOLACCI, *The Reception* cit., p. 134.

³² Bertolacci observes that Avicenna calls individually 'subject-matters' what Aristotle calls collectively 'genus'. See BERTOLACCI, *The Reception* cit., p. 135.

The passage also prescribes a condition according to which a single science can examine several subjects: these subjects must be somehow unified³³. The contrast between a plurality of subjects and a unique unifying thing could provide a basis for the Weak Interpretation, pushing us to identify the unique unifying thing with the 'first subject' of science.

For present purposes, the case of genus as the unifying thing is especially interesting. First of all, (T2) implies that the relation between the existent and the categories is similar to the relation between a genus and its species. Moreover, the mention of the 'first subject' along with its species and parts in *Burhān*, III, 8 — text (v) above — could be accounted for inasmuch as species and parts are subjects in a loose sense. Finally, subjects are things whose essential accidents are enquired into, and Avicenna explicitly states that it is the task of a science to enquire into the essential accidents not only of its first subject, but also of species and parts of its first subject. In *Burhān*, II, 7, one finds a certain proof of the fact that the species of the subject of a science can be called 'subjects' in a loose sense. In this case, the loose meaning of 'subject' comes along with a loose meaning of 'science': while comparing two sciences on the basis of their subjects, Avicenna observes that sometimes a science is part of another science, without being a science on its own. This happens, in particular, when the subjects of two sciences are a genus and one of its species, respectively³⁴.

There is possibly also another way to find a distinction in *Burhān*, II, 6 between two meanings of 'subject'. Subject₂ could be identified with the logical subject entering the propositions which are proper principles of a science, or the propositions which are its questions. In both cases, predicates of those propositions are essential accidents of their logical subjects. The case of questions is particularly interesting, because it shows the whole range of things enquired into by a science (not only things which are its starting-points, as it could be in the case of proper principles):

Burhān, II, 6 (p. 155, lin. 9-10; pp. 157, lin. 21 - 158, lin. 6)

« And the questions are the statements whose predicates are essential accidents either of this subject or of its species or of its accidents; there is uncertainty about them [i. e. the statements], so that their state becomes clear³⁵ in that science.
[...]

We say that the subject in the question proper to a certain science is either

³³ Cf. al-Fārābī's passage in EICHNER, *Al-Fārābī and Ibn Sīnā* cit., pp. 79-80. All the four cases mentioned in Avicenna's text except the first are derived from al-Fārābī.

³⁴ Cf. *Burhān*, II, 7, pp. 162-163.

³⁵ Reading *fa-yastabīnu*.

entering the whole of its subject [i. e. of the science] or [belonging] to the whole of its essential accidents. The one entering the whole of its subject is either the subject itself [...] or a species of its [...] The one [belonging] to its accidents is either an essential accident of its subject [...] or an essential accident of the species of its subject [...] or an essential accident of an essential accident of its [...] or an essential accident of the species of an accident of its [...]».

Identifying subjects₂ of a science with the logical subjects of its questions would grant that subjects₂ are exactly the things whose essential attributes are proved in that science. Without going into details, subjects₂ would include both species and essential accidents, and should be related in definite ways to the actual subject of science, namely subject₁³⁶.

Whether the first or the second way to ground a distinction between subject₁ and subject₂ should be correct³⁷, one would find the actual subject of science opposed to its species and, possibly, to its essential accidents. On this basis, the presence of the expression 'first subject' in (T2) could be accounted for. Having mentioned the existent as the first subject of metaphysics, Avicenna states that metaphysics enquires into its species and its proper accidents, which, according to the Weak Interpretation, are subjects of metaphysics in a loose sense (subjects₂). Therefore, Avicenna would here use the expression 'first subject' in order to make a distinction between the subject₁ of metaphysics, namely the existent, on the one hand, and its subjects₂, namely the species and possibly the proper accidents of the existent, on the other.

Turning to (T1), however, the Weak Interpretation does not provide any reason why Avicenna should use the expression 'first subject' rather than 'subject'. Even if the distinction between subject₁ and subject₂ should be correct, so that causes were numbered among the subjects₂ of metaphysics, Avicenna's argument would not need to mention the first subject. Indeed, if metaphysics enquired *only* into the essential accidents belonging to causes inasmuch as they are existent, causes would not be subjects of metaphysics at all, even in a loose sense (subject₂). I would justify this last statement thus: if A is a subject₂ of a given science, this latter should enquire into the essential accidents belonging to A inasmuch as it

³⁶ For a discussion of the last two quoted passages of *Burhān*, II, 6 from the point of view of the set of *per se* predicates falling within the consideration of a given science, see R. STROBINO, *Per Se, Inseparability, Containment and Implication. Bridging the Gap between Avicenna's Theory of Demonstration and Logic of the Predicables*, « Oriens », 44, 2016, pp. 181-266 (especially pp. 211-216).

³⁷ Actually, I do not think they are. Considering Avicenna's chapter in its entirety and its background in al-Fārābī, it seems to me that Avicenna allows for a plurality of subjects without implying a loose sense of 'subject'. Nonetheless, I take into account the possibility that one of the two hypotheses is correct in order to grant a basis for the Weak Interpretation and show that it is inadequate anyway.

is A; if it only enquired into the essential accidents belonging to A inasmuch as it is its subject₁, it would eventually enquire only into the essential accidents of its subject₁; consequently, Avicenna's formulation of the full task of science would be pointless — more generally, speaking about subjects₂ would be pointless.

For example, let us suppose that S is the subject₁ of a certain science, while A₁, ..., A_n are its subjects₂. Accordingly, the full task of the science is enquiring into the essential accidents belonging to S and into the essential accidents belonging to each A_i. Let us suppose that, for every i, the science enquires only into the essential accidents belonging to A_i inasmuch as it is S. Obviously, the essential accidents belonging to A_i inasmuch as it is S are all and only the essential accidents belonging to S inasmuch as it is S. Consequently, the essential accidents enquired into by the science would be all and only the essential accidents belonging to S inasmuch as it is S. This being the case, it would be redundant to say that the science enquires into the essential accidents belonging to S and into the essential accidents belonging to each A_i, the two tasks being eventually the same one. It would be pointless to say that A₁, ..., A_n are the subjects₂ of the science, since its full task is accomplished referring only to S. The only way to speak sensibly about A_i as a subject₂ of the science is maintaining that the science enquires into the essential accidents belonging to A_i inasmuch as it is A_i. If this is so, saying that the science enquires only into the essential accidents belonging to A_i inasmuch as it is S does not only imply that A_i is not its subject₁, but that it is not one of its subjects₂ either.

The Weak Interpretation is therefore unable to explain the presence of the expression 'first subject' in both (T1) and (T2).

I. 4. *Strong Interpretation*

According to the Weak Interpretation of the expression 'first subject', the adjective 'first' is just a means to single out the subject of a science from among a plurality of things examined within that science. On the contrary, according to the Strong Interpretation, the adjective 'first' acquires a deeper historical and doctrinal significance. In particular, the Strong Interpretation connects the expression 'first subject' to a very technical usage of the adjective 'first' made by Aristotle in his *Posterior Analytics*. As previously said, Aristotle never uses the expression 'first subject' in the epistemological meaning dealt with here; however, in *Posterior Analytics*, A, 4-5 he uses the adjective 'first' in order to express a concept which could be labelled 'belonging to something as to the first'.

In *Posterior Analytics*, A, 4, Aristotle provides an explanation for three technical expressions: κατὰ παντός, καθ' αὐτό and καθόλου. After having defined κατὰ παντός and after having provided the four definitions of καθ' αὐτό, Aristotle finally comes to καθόλου:

An. Post., A, 4, 73b32-74a3³⁸

«Something holds universally when it is proved of an arbitrary and first case. E. g. having two right angles does not hold universally of the figure — you may indeed prove of a figure that it has two right angles, but not of an arbitrary figure, nor can you use an arbitrary figure in proving it; for the quadrangle is a figure but does not have angles equal to two right angles. An arbitrary isosceles does have angles equal to two right angles — but it is not first: the triangle is prior. Thus if an arbitrary first case is proved to have two right angles (or whatever else), then it holds universally of this first item, and the demonstration applies to it universally by itself. To the other items it applies in a certain way not by themselves — it does not apply to the isosceles universally, but extends further».

In the passage preceding the quoted one, Aristotle has explained what it means to be 'universal' for something else. Here he prescribes two 'proof-theoretical' conditions for something to be universal. The first condition is 'being proved of an arbitrary case'. The second condition is 'being proved of the first'. The example given by Aristotle explains what he means. One can prove of whatever isosceles triangle that the sum of its angles is equal to two right angles (the first condition being so satisfied). However, the isosceles triangle is not the first thing of which this property can be proved, because the triangle has this property prior to the isosceles triangle. Indeed, all the triangles — isosceles or not — have this property; moreover, we can prove this property also of the isosceles triangle just inasmuch as it is a triangle.

The present paper is not directly concerned with Aristotle's notion of 'first' in *Posterior Analytics*, A, 4³⁹. For present purposes, it is enough to stress three

³⁸ Barnes' translation (slightly modified) in ARISTOTLE, *Posterior Analytics* cit., p. 8. An. Post., A, 4, 73b32-74a3: τὸ καθόλου δὲ ὑπάρχει τότε, ὅταν ἐπὶ τοῦ τυχόντος καὶ πρώτου δεικνύηται. οἷον τὸ δύο ὀρθὰς ἔχειν οὔτε τῷ σχήματι ἐστὶ καθόλου (καίτοι ἐστὶ δεῖξαι κατὰ σχήματος ὅτι δύο ὀρθὰς ἔχει, ἀλλ' οὐ τοῦ τυχόντος σχήματος, οὐδὲ χρητὶ τῷ τυχόντι σχήματι δεικνύς: τὸ γὰρ τετράγωνον σχῆμα μὲν, οὐκ ἔχει δὲ δύο ὀρθαῖς ἴσας) — τὸ δ' ἰσοσκελὲς ἔχει μὲν τὸ τυχὸν δύο ὀρθαῖς ἴσας, ἀλλ' οὐ πρῶτον, ἀλλὰ τὸ τρίγωνον πρότερον. ὁ τοίνυν τὸ τυχὸν πρῶτον δείκνυται δύο ὀρθὰς ἔχον ἢ ὅτι οὐκ ἄλλο, τοῦτω πρῶτω ὑπάρχει καθόλου, καὶ ἡ ἀπόδειξις καθ' αὐτὸ τοῦτου καθόλου ἐστὶ, τῶν δ' ἄλλων τρόπον τινὰ οὐ καθ' αὐτό, οὐδὲ τοῦ ἰσοσκελοῦς οὐκ ἐστὶ καθόλου ἀλλ' ἐπὶ πλεον.

³⁹ For details about Aristotle's account see: Barnes' commentary in ARISTOTLE, *Posterior Analytics* cit., pp. 118-120; MIGNUCCI, *L'argomentazione dimostrativa* cit., pp. 81-85. Furthermore, Aristotle's notion of 'first' is probably not confined to the doctrine of science. In particular, I thank Marwan Rashed for having brought to my attention the fact that Aristotle's logical application of the adjective 'first' in *Posterior Analytics*, A, 4-5 may be linked to its application in *Physics*, according to Benjamin Morison's interpretation in B. MORISON, *Aristotle on Primary Time* in *Physics* 6, «Oxford Studies in Ancient Philosophy», 45, 2013, pp. 149-193. In particular, see pp. 160-164 for the meaning of 'first' ('primary' in Morison's paper) in the expression 'first time' and for an analogy with 'first place' in *Physics*, 4. Indeed, the parallels between place and time drawn at pp. 163-164

features of Aristotle's exposition. (a) First of all, Aristotle's notion concerns demonstration, as far as one can grasp from what is said in the text. This implies that it only concerns the inherence of an *accident* in a certain subject; other applications of the notion are not witnessed by the *Posterior Analytics*. (b) Moreover, the notion of 'first' is used to qualify a subject of which an attribute is *demonstrated*. This being the case, there is room for middle terms between an attribute and the subject to which it 'belongs as to the first'; in other words, the corresponding proposition does not need to be immediate as undemonstrable premisses must be⁴⁰. There is a kind of mediation which is precluded, though. Suppose A is intensionally included in B (or B extensionally included in A⁴¹); suppose C is proved of an arbitrary A. Of course, C is proved of an arbitrary B through the mediation of A, but this is exactly what prevents B from being the first of which C is proved. (c) A last point worth mentioning is the fact that Aristotle's second condition for being 'universal' — namely 'being proved of the first' — is never defined by him as such, namely in isolation from the first condition. What Aristotle means can be grasped only because he provides an example of subject-predicate pair for which only the first condition for being 'universal' holds, and an example of subject-predicate pair for which both the first and the second conditions hold. However, he does not provide an example for which only the second condition holds. The possibility of such an example is not explicitly excluded, but it is not witnessed in Aristotle's *Posterior Analytics*. In other words, one cannot know whether Aristotle's notion of 'first' is meant to be applied beyond cases of universal predication.

Turning to Avicenna's *Book of Demonstration*, one finds that the notion of 'first' is one of the main topics dealt with in *Burhān*, II, 3 (actually, in this chapter Avicenna uses the adjective *awwalī*, which will be translated as 'primary' in what follows). However, Avicenna uses the expression 'primary' even before, while dealing with the expression *bi-dātihi* (namely the Arabic equivalent of Aristotle's καθ' αὐτό) in

are easily extended to the subject of attributes: (a) an attribute *x* is in a subject *S* in respect of something else iff *x* is in *S* but there is something *y* such that *y* is part of *S* (in the sense according to which a genus is part of its species: cf. *Metaph.*, Δ, 25) and *x* is in *y*; (b) an attribute *x* is in a subject *S* primarily iff *x* is in *S* but there is nothing else *y* such that *y* is part of *S* and *x* is in *y*.

⁴⁰ Cf. *An. Post.*, A 2. This feature of Aristotle's account has been considered problematic. See MIGNUCCI, *L'argomentazione dimostrativa* cit., pp. 83-84.

⁴¹ Both the extensional and the intensional point of view are present in Aristotle's account. However, Aristotle's observation in *An. Post.*, A, 5, 74a16-17 seems to suggest that the intensional point of view is actually the most relevant one (because of the possibility that intensional distinctions do not imply extensional ones; cf. MIGNUCCI, *L'argomentazione dimostrativa* cit., pp. 90-91).

Burhān, II, 2. After having listed five meanings of *bi-dātihi*⁴² and having stated that only the first and the second one are relevant in *Burhān*, he says:

Burhān, II, 2 (p. 128, lin. 6-13)

«And sometimes ['by itself' (*bi-dātihi*)] is said of a more proper and verified notion. It is meant by it what belongs to the thing (*ya 'riḍu li-l-ṣay*') or is said of it (*yuqālu 'alayhi*) because of itself [i. e. the thing] and because it [i. e. the thing] is what it is, neither in virtue of something more common than it nor in virtue of something more proper than it. And when ['by itself' (*bi-dātihi*)] is used according to this notion in the First Teaching, it includes the condition of the 'primary-ness' (*al-awwaliyya*). [...] For this [reason] it was said: "neither the music nor the whiteness [belongs] to the animal by itself (*bi-dātihi*)", because the music is among the properties of the man, so that it [belongs] to the animal because of the fact that it is a man. As for whiteness, it [belongs] to it [i. e. the animal] because of the fact that it is a composed body ».

Avicenna explicitly refers to Aristotle's *Posterior Analytics* ('First Teaching') while connecting a certain usage of the expression '*bi-dātihi*' with 'primary-ness'. Indeed, the notion of *bi-dātihi* here described conveys the same basic idea as Aristotle's notion of 'first'. As for the three features of Aristotle's exposition mentioned above, Avicenna's 'primary-ness' seems to behave as follows. (a) On the whole, there is no evidence of an application of the notion of 'primary' beyond accidents inhering in a subject⁴³. Avicenna's examples (music, whiteness) concern accidental — not essential⁴⁴ — attributes. (b) Like Aristotle's notion of 'first', Avicenna's notion of 'primary' does not imply the lack of mediation between the accident and the subject. This point will be explicitly stated in

⁴² The first four meanings correspond to the meanings of καθ' αὐτό in Aristotle's *Posterior Analytics*, A, 4. For Avicenna's re-working of the first two meanings of καθ' αὐτό, see STROBINO, *Per Se, Inseparability* cit., pp. 187-208. The fifth meaning is added by Avicenna. See below, n. 46.

⁴³ Unless one reads the expression '*yuqālu 'alayhi*' as referring to essential predication (and as opposed to '*ya 'riḍu li-l-ṣay*', which would refer to accidental predication). The ground for this interpretation would be the fact that Aristotle's expression 'is said of a subject' (καθ' ὑποκειμένου λέγεται) in *Categories*, 2 — traditionally identified with essential predication — is translated into Arabic as '*yuqālu 'alā mawḍū*'. However, the *Madḥal* and the *Maqūlāt* of the *Book of the Cure* (the Avicennian re-working of the *Isagoge* and the *Categories*, respectively, within the *Book of the Cure*) show that Avicenna does not identify the relation 'being said of a subject' with essential predication, but with synonymous predication, which is in turn claimed to be proper to all predicables. See S. DI VINCENTO, *Avicenna's reworking of Porphyry's 'common accident' in the light of Aristotle's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 163-194 (especially pp. 171-181); N. CAMINADA, *A quotation of an anonymous 'logician' in Avicenna's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 195-237 (especially pp. 197-208).

⁴⁴ Here I mean 'essential' as synonymous with 'constitutive'.

Burhān, II, 3⁴⁵, but can be guessed on the basis of the examples given in the quoted text⁴⁶. Of course, the kind of mediation is precluded, which contradicts the very

⁴⁵ *Burhān*, II, 3 (p. 136, lin. 14-15): «It is not in the condition of the first that there is not a middle between it and the subject. Indeed, between this accident of the triangle and the triangle there are middles and joining terms all of which are accidents nearer than it». Cf. STROBINO, *Per Se, Inseparability* cit., pp. 219-220.

⁴⁶ The text implies that 'whiteness' primarily belongs to 'body'. On the other hand, Avicenna would maintain that 'whiteness' immediately belongs to 'surface', and that it belongs to 'body' through the mediation of 'surface'. This last point is explicitly made by Avicenna a few lines before the quoted text, while dealing with the fifth meaning of *bi-dātihi*. The passage is interesting also because it witnesses another, different usage by Avicenna of the expression 'primary', according to which primary-ness actually consists in the lack of mediation. *Burhān*, II, 2 (pp. 127, lin. 21 - 128, lin. 2): «And 'by itself' (*bi-dātihi*) is also said of what is primary (*awwalī*) among the accidents [which are] in the thing. By my saying 'primary', I mean that it does not belong (*lam ya riḍ*) to another thing which then belongs (*araḍa*) to it [i. e. the thing for which the accident is supposed to be primary]. Rather, ['by itself' is said of] that in which there is no middle between the accident and that to which it belongs (*al-ma rūḍ lahū*), this latter (*al-ma rūḍ lahū*) being the cause of the fact that it is said to be an accident in another thing, as when we say 'body is white' and 'surface is white'. The surface is white by itself, while the body is white because the surface is white». The expression 'primary', as here employed, does not convey the same basic idea as the expression 'first', as employed in *Posterior Analytics*, A, 4 (cf. also *Burhān*, II, 3, p. 136, lin. 7-10). I am inclined to draw a sharp distinction between the two occurrences of the expression 'primary' in *Burhān*, II, 2; for a reading without such distinction see STROBINO, *Per Se, Inseparability* cit., pp. 201-202. An analogous addition to the aristotelian list of the meanings of καθ' αὐτό is found in THEMISTIUS, *Posteriorum Analyticorum Paraphrasis*, ed. M WALLIES, Reimer, Berlin 1900 (CAG vol. V.1), p. 11, lin. 6-7 (third meaning of καθ' αὐτό); cf. STROBINO, *Per Se, Inseparability* cit., p. 202 n. 36. Leaving aside the question of the influence of Themistius on Avicenna (cf. below, n. 50), it is possible that such additions in Themistius' and Avicenna's works ultimately depend on the second meaning of the expression καθ' ὃ and the third meaning of the expression καθ' αὐτό in *Metaphysics*, Δ, 18 (both the expressions are translated into Arabic as *bi-dātihi*). *Metaph.*, Δ, 18, 1022a14-17: Τὸ καθ' ὃ λέγεται πολλαχῶς, ἓνα μὲν τρόπον [...] ἓνα δὲ ἐν ᾧ πρῶτον πέφυκε γίνεσθαι, οἷον τὸ χρῶμα ἐν τῇ ἐπιφανείᾳ. *Metaph.*, Δ, 18, 1022a29-32: ἔτι δὲ εἰ ἐν αὐτῷ δέδεκται πρῶτον ἢ τῶν αὐτοῦ τινί, οἷον ἡ ἐπιφάνεια λευκὴ καθ' ἑαυτήν, καὶ ζῆν ὁ ἄνθρωπος καθ' αὐτόν· ἡ γὰρ ψυχὴ μέρος τι τοῦ ἀνθρώπου, ἐν ᾧ πρῶτον τὸ ζῆν. Cf. Averroes' commentary on these two passages. AVERROES, *Tafsīr mā ba 'd aṭ-ṭabī'at*, vol. 2, ed. M. BOUYGES, deuxième édition, Dar El-Machreq Editeurs (Imprimerie Catholique), Beyrouth 1967 (DAL, C. 23), pp. 632-633: «Then he said: And in another way ['by itself' (*bi-dātihi*) is said of] that in which [something] is firstly (*awwalan*) by nature, like the colour in the surface. He means: And in another way it is said that a thing exists in [another] thing by itself if it [i. e. the former] exists in [i. e. in the latter] without any middle, as when we say that the colour exists in the surface by itself and in the body not by itself, because its existence is in the surface firstly and in the body secondly — I mean that it exists, as for the body, only in its surface». *Ibid.*, p. 635: «Then he said: And in another way ['by itself' (*bi-dātihi*) is said] if [something] has already appeared in the thing firstly, or it [belongs] to a certain thing, like the surface, for it is white by itself. He means: And by itself is also said of the predicates belonging to the subject in virtue of the nature of the subject, without any middle, as when we say that the surface is white by itself, i. e. firstly and without any middle — since the body is white only in virtue of the surface. This is as we recalled before». In both cases, Averroes explicitly links *bi-dātihi* with lack of mediation; moreover, he states that 'colour' and 'whiteness' do not belong to 'body' *bi-dātihi*, while they belong to 'surface' *bi-dātihi*. In other words, Averroes' interpretation of these two passages perfectly corresponds to Avicenna's fifth meaning of *bi-dātihi* in *Burhān*, II, 2.

idea of 'primary-ness', namely the mediation involving intensional/extensional inclusions⁴⁷. (c) Unlike Aristotle, Avicenna applies the notion independently of universal predication, as it is once again witnessed by the examples⁴⁸.

Having established that Aristotle's notion of 'first' finds a place in Avicenna's work, (T1) can be interpreted on the basis of this notion. To use Aristotle's example once more: if one had to enquire into the accidents belonging to the isosceles triangle inasmuch as it is a triangle, the first subject to which these accidents belong would be the triangle, not the isosceles triangle. (T1) states exactly the same about the accidents belonging to the causes inasmuch as they are existent: if one had to enquire into these accidents, the first subject to which they belong would be the existent, not the causes. Using the expression 'first subject', Avicenna directly refers to the first subject of inherence of those accidents. This is the reason why he uses the expression 'first subject' rather than 'subject'. As already observed, the expression must refer also to the subject of metaphysics, at least indirectly⁴⁹. I will come back to this later, but one can already figure out Avicenna's idea underlying this move: the requirement that the subject of a science be the first subject of inherence of the accidents enquired into in that science.

In (T2) Avicenna explicitly speaks about 'the first subject of this science', but it is not straightforward to understand why Avicenna uses the expression 'first subject' in this passage, as it was about (T1) on the basis of the Aristotelian notion of 'first'. Indeed, I would claim it is not possible to understand fully this passage merely on the basis of the Aristotelian notion, nor on the basis of the quoted passage from *Burhān*, II, 2. However, turning to Avicenna's re-working of the Aristotelian notion in *Burhān*, II, 3, a more complex picture is found. For present purposes, it is enough to take into consideration the following statements:

Burhān, II, 3 (p. 135, lin. 8-9; pp. 136, lin. 17 - 137, lin. 7)

«If the thing is predicated of the whole of the subject (like the genus, the differentia and the necessary concomitant accident), it is primary (*awwaliyyan*) for it [i. e. the subject] only if it is not firstly (*awwalan*) predicated of something more common than it (in which case it would be predicated of it through the mediation of that thing).
[...]

⁴⁷ See above feature (b) of Aristotle's notion of 'first'. The Avicennian approach in this passage is actually extensional rather than intensional.

⁴⁸ 'Music' primarily belongs to 'man', even though it does not belong to every man. 'Whiteness' primarily belongs to 'body', even though it does not belong to every body.

⁴⁹ See above my first remark on (T1) in section I.1.

As for what is not predicated of the whole of the subject, it is not possible that this [belongs] to the complex of the essential things entering the quiddity of the thing. Rather, it [belongs] to the complex of the essential things entering the quiddity of the species of the thing, or to the complex of the proper accidents essential to the thing. [...] As for the first division, it is like the differentiae dividing the genus which do not divide any species under it at all (so that they are primary differentiae of the species insofar as they constitute them [i. e. the species] without constituting their genera; while they are primary differentiae of the genera insofar as they divide them [i. e. the genera] without dividing their species). As for the second division, they are the accidents proper to a certain genus which do not encompass it and [such that] the genus does not need to become a certain distinct species in order to be prepared to receive such an accident [...]».

As in *Burhān*, II, 2, Avicenna here takes into account the notion of 'primary' independently of universal predication: he deals both with predicables belonging to the whole subject and with predicables not belonging to the whole subject. The real innovation of *Burhān*, II, 3, with respect to Aristotle's notion of 'first', rather concerns feature (a): Avicenna takes here into account primary predicables in general, applying the notion of 'primary' beyond the inherence of accidents in a subject⁵⁰.

Avicenna deals with predicables belonging to the whole subject and predicables not belonging to the whole subject separately (in the first and the second part of the text, respectively). To the first class belong genus, differentia (meant as constitutive differentia) and necessary concomitant. To the second

⁵⁰ As underscored by Strobino, Avicenna's discussion of primary predicates is part of his discussion of *per se* predicates. The beginning of the section on primary predicates makes it clear that Avicenna's concern is applying the notion of 'primary' to predicates which are *bi-dātihi* according to both the first and the second meaning of *bi-dātihi* outlined in *Burhān*, II, 2 (the only meanings which are relevant to the theory of science, according to Avicenna). As a consequence, Avicenna's notion of 'primary' is applied also to predicates which are constitutive of the essence of their subjects (*per se* predicates of the first kind are included in the definition of their subjects). Cf. STROBINO, *Per Se, Inseparability* cit., pp. 217-219. Avicenna's application of the notion of 'primary' to predicables in general is very systematic, as will be clear. However, in his paraphrasis of *Posterior Analytics*, A, 4 Themistius had already spoken about genus belonging 'universally' to differentiae and differentiae belonging 'universally' to species. See THEMISTIUS, *Posteriorum Analyticorum Paraphrasis*, p. 13. Themistius' explicit aim is to make room for the possibility that genus and differentiae be demonstrated, since demonstration is properly about what 'universally' belongs to something else. See also Philoponus referring to Themistius' opinion in IOANNES PHILOPONUS, *In Aristotelis Analytica Posteriora Commentaria cum Anonymo in Librum II*, ed. M. WALLIES, Reimer, Berlin 1909 (CAG vol. XIII.3), p. 70. For evidence of the influence on Avicenna of Themistius' and Philoponus' works on the *Posterior Analytics* see R. STROBINO, *Avicenna's Use of the Arabic Translations of the Posterior Analytics and the Ancient Commentary Tradition*, «Oriens», 40, 2012, pp. 355-389.

class belong divisive differentia and the proper accident which is not a necessary concomitant. For each predicable, Avicenna provides a condition which must be satisfied in order for it to be primary, as summarized in the following table⁵¹:

⁵¹ The present analysis of primary predication in *Burhān*, II, 3 is only meant to highlight the conditions which must be fulfilled by each predicable in order for it to be primary. For a wider account of *Burhān*, II, 3, including an account of other distinctions regarding primary predicates, see STROBINO, *Per Se, Inseparability* cit., pp. 217-234. Strobino's analysis, however, focuses only on predicables which are predicated of the whole of the subject (genus, constitutive differentia, necessary concomitant); predicables which are not predicated of the whole of the subject (divisive differentia, non-coextensive proper accident) are not taken into account. As a consequence, Strobino states that « non-primary predicates are more general than the subject in that they need to hold at least of the genus of the subject » (p. 219). This is true as far as the first class of predicables is concerned. However, a more complex picture is found if both classes of predicables are taken into account. Actually, from the extensional point of view, the two classes of predicables are characterized by opposite primary-ness conditions. Genus, constitutive differentia and necessary concomitant are primarily predicated of the *most general* subject of which they are predicated. On the other hand, divisive differentia and non-coextensive proper accident are primarily predicated of the *most specific* subject of which they are predicated. This striking divergence can be accounted for, since it is due to an actual, intrinsic difference between primary predicables, which is, however, grounded on a unitary notion of 'primary-ness'. The main idea of primary-ness, as is gathered from *Burhān*, II, 2, is the following: A primarily belongs to B iff A belongs to B in virtue of the fact that B is B, not something more general nor something more specific; moreover, if A belongs to something more general or more specific than B — let it be C, then it belongs to C inasmuch as C is B, in virtue of the fact that A belongs to B. On the other hand, Avicenna's application of 'primary-ness' to predicables in general, as is found in *Burhān*, II, 3, is not based on an absolute primary-ness relation between predicates and subjects; rather, it is based on a relation between predicates and subjects which is relative to the predicable involved in the predication. In other words, a primary-ness relation between a predicate and a subject takes into account the fact that the predicate belongs to the subject in a definite way, namely as a definite predicable. Accordingly, from the point of view of *Burhān*, II, 3, the full statement of a primary-ness relation is not 'the predicate A is primary for the subject B'; rather, it is: 'the predicate A is a primary P for the subject B', where P is a given predicable. On the basis of the unitary notion of 'primary-ness', this amounts to saying that A is a primary P for B in virtue of the fact that B is B; moreover, if A is a P for something more general or more specific than B — let it be C, then A is a P for C inasmuch as C is B, in virtue of the fact that A is a P for B. The extensional conditions governing the primary-ness relation are determined for arbitrary predicates and subjects, once the predicable P is determined. Let P be 'genus'. Something is a genus of the more specific subject in virtue of the fact that it is a genus of the more general subject. Indeed, a genus of the more general is also a genus of the more specific, but the converse does not hold. Consequently, something is a primary genus of the most general subject for which it is a genus. The same argument holds if 'genus' is replaced with 'constitutive differentia' or 'necessary concomitant'. Let P be 'divisive differentia'. Something is a divisive differentia of the more general subject in virtue of the fact that it is a divisive differentia of the more specific subject. Indeed, a divisive differentia of the more specific is also a divisive differentia of the more general, but the converse does not hold. Consequently, something is a primary divisive differentia of the most specific subject for which it is a divisive differentia. The same argument holds if 'divisive differentia' is replaced with 'proper accident'.

Primary predicates	Predicated of the whole subject	Genus	If they are not firstly predicated of something more common than the subject
		[Constitutive] differentia	
		Necessary concomitant	
	Not predicated of the whole subject	[Divisive] differentia	If it does not divide the species
		Proper, non-coextensive accident	If the subject does not need to become a determinate species in order to receive it

The following examples will help to clarify Avicenna's point:

a) 'body' is a genus of 'man', but not its primary genus; 'body' is the primary genus of 'living body'; 'animal' is the primary genus of 'man';

b) 'sensitive' is a constitutive differentia of 'man', but not its primary constitutive differentia; 'sensitive' is the primary constitutive differentia of 'animal'; 'rational' is the primary constitutive differentia of 'man';

c) 'mobile' is a necessary concomitant of 'man', but not one of its primary necessary concomitants; 'mobile' is a primary necessary concomitant of 'body'; 'capable of laughing' is a primary necessary concomitant of 'man';

d) 'rational' is a divisive differentia of 'body', but not its primary divisive differentia; 'rational' is a primary divisive differentia of 'animal'; 'living' is a primary divisive differentia of 'body';

e) 'even' is a proper accident of 'quantity'⁵², but not one of its primary proper accidents; 'even' is a primary proper accident of 'number'; 'divisible into two equal parts' is a primary proper accident of 'quantity'.

On the basis of this enlarged range of application of the notion of 'primary', Avicenna's usage of the expression 'first subject' in (T2) can be accounted for. According to the *divisio textus* given above, the content of (T2) can be summarized thus:

⁵² This statement may be the most difficult to accept, because of the tendency to use the expression 'proper accident' to refer to what is here called 'primary proper accident'. However, in order to understand Avicenna's point, one has to make room for a loose meaning of 'proper accident': A is a proper accident of B just in case A is an accident of B and A is *proper* to B, i. e. A does not belong to anything external to B (whether A is a proper accident *also* of a species of B being irrelevant).

- [a] Existent *qua* existent is the *first* subject of metaphysics
- [b] Metaphysics enquires into what attaches to the existent *unconditionally*
- [c] Species of the existent
- [c₁] Explanatory remarks on the species of the existent
- [d] Proper accidents of the existent
- [d₁] Explanatory remarks on the proper accidents of the existent

At first glance, the explanatory remarks in [c₁] and [d₁] may seem to be meant to clarify [c] and [d], respectively, explaining why some things are species of the existent and other things are its proper accidents. Actually, they are not meant to clarify these points. Indeed, both 'substance' and 'man' may be called species of the existent; similarly, even proper accidents of a determinate genus are proper accidents of the existent. Rather, [c₁] and [d₁] correspond to the expression 'unconditionally' in [b]. They are meant to explain why the things mentioned in [c] and [d], respectively, attach to the existent *unconditionally*.

Looking more closely at [c₁] and [d₁], one realizes that Avicenna is just arguing for the fulfillment of the conditions of primary predication prescribed in *Burhān*, II, 3. In particular, in [c₁] Avicenna maintains that the existent is (like)⁵³ the primary genus of the species enquired into in metaphysics, namely the categories. He states that the existent does not need previous divisions in order to be divided into them. Indeed, if there were a previous division, the existent would be divided into something — let it be *x* — more common than the categories falling under it. Consequently, the existent would be predicated of *x* before being predicated of the subordinate categories: it would not be primarily predicated of these categories⁵⁴. In [d₁], Avicenna maintains that the accidents enquired into in metaphysics are primary proper accidents of the existent. This is true because the existent does not need to be specified in order to receive those accidents⁵⁵.

⁵³ Avicenna would not affirm that the existent is a genus.

⁵⁴ The idea that the existent is primarily divided into the categories poses a doctrinal question, which I restrict myself to pointing out, without trying to solve it here. Several passages of the *Ilāhiyyāt* suggest or explicitly state that the existent is divided into necessary existent and possible existent. However, *Ilāhiyyāt*, VIII, 4 implies that the necessary existent does not fall within any of the categories. Consequently, the division of the existent into necessary existent and possible existent would be prior to the division into the categories, which concerns only the possible existent. This seemingly contradicts the primary division of the existent into the categories, since the possible existent is more common than the categories falling under it.

⁵⁵ One could believe this step of Avicenna's argument to be insufficient inasmuch as Avicenna only states the fulfillment of the primary-ness condition concerning proper accidents which are not necessary concomitants. However, one would reasonably expect that metaphysics enquires into the necessary concomitants of the existent as well. Consequently, Avicenna should also argue for the fulfillment of the primary-ness condition for necessary concomitants of the existent enquired into in

I have stated that $[c_1]$ and $[d_1]$ correspond to the expression ‘unconditionally’. On the other hand, it has been shown that $[c_1]$ and $[d_1]$ argue for the fulfillment of the conditions of primary predication. The reason why ‘unconditionally’⁵⁶ is linked to primary predication is the following: $[c_1]$ if A is a genus of B, then: A is a primary genus of B if and only if there is no C such that C is a species of A and A may be B only *on the condition* of being C; $[d_1]$ if A is a proper accident of B, then: A is a primary proper accident of B if and only if there is no C such that C is a species of B and A may inhere in B only *on the condition* of B being C.

By using the expression ‘first subject’ in (T2) rather than ‘subject’, Avicenna means to underscore a peculiar feature that the subject of a science must have, namely its ‘firstness’ with respect to the species as well as to the accidents enquired into in that science. The adjective ‘first’ in section [a] refers to ‘unconditionally’ in section [b], which is in turn explained by means of primary predication in sections $[c_1]$ and $[d_1]$.

To conclude, it is worth observing that the Strong Interpretation seems to be confirmed, albeit vaguely and partially⁵⁷, by the paragraph concerning (T2) in the *Discussions* (*Mubāḥaṭāt*)⁵⁸. The expression ‘first subject’ is here replaced by ‘subject’, while the adverbial *awwalan* explicitly qualifies the relation between the subject and the categories:

Mubāḥaṭāt, 799 (p. 278)⁵⁹

«The subject of the science known as metaphysics: the existent inasmuch as it is existent. The things sought by it are the things which attach to it inasmuch as it is existent, unconditionally. Some of these things are like the species, such as substance, quantity and quality. Indeed, the existent is firstly (*awwalan*) divided into them».

metaphysics. Actually, in *Ilāhiyyāt*, I, 2 Avicenna never takes into account necessary concomitants of the existent. Even if he did, however, he could do without this further proof because nothing is more common than the existent. Consequently, all necessary concomitants of the existent are primary (for the same reason, every accident is a proper accident of the existent, while only some accidents are its primary proper accidents; Avicenna proves to be aware of this last point: he explicitly states it while proving that ‘being a principle’ is a proper accident of the existent — see below, Appendix 2).

⁵⁶ By the way, the expression ‘unconditionally’ in (T2) is perhaps superfluous. It seems to be meant to stress the idea already conveyed by the expression ‘inasmuch as it is existent’ in a passage where this very idea is essential.

⁵⁷ The evidence concerns only the relation between the subject and the species. As for proper accidents, Avicenna’s text is quoted without relevant comments.

⁵⁸ On the nature of this work, see D. C. REISMAN, *The Making of the Avicennan Tradition. The Transmission, Contents, and Structure of Ibn Sīnā’s al-Mubāḥaṭāt (The Discussions)*, Brill, Leiden - Boston - Köln 2002.

⁵⁹ Translation based on AVICENNA, *Mubāḥaṭāt*, ed. M. BĪDĀRFAR, *al-Maṭba‘at-i Amīr*, Qom 1413/1992.

I. 5. Final remarks

Before moving to the Latin reception of Avicenna's notion of 'first subject' in the second section, I would like to make two final remarks on what has been argued in this section.

The first remark concerns the implicit assumption in my exposition that the expression 'first subject' should mean the same in its two occurrences in *Ilāhiyyāt*, I, 1-2. On this basis, the Weak Interpretation has been declared insufficient, without considering the possibility that it could work as far as only (T2) was concerned. Other instances of mixed interpretations have not been taken into account either. The rationale grounding the implicit assumption is that a mixed interpretation should not be taken into account unless an adequate unifying interpretation is not available. I believe the Strong Interpretation to be such an adequate unifying interpretation.

The second remark concerns the possibility of maintaining that both the Weak Interpretation and the Strong Interpretation are correct, 'building' the Strong Interpretation upon the Weak Interpretation. This would allow us to speak about 'subjects' of a science – in the plural – to refer to the actual subject as well as to its species and proper accidents; the expression 'first subject' would single out the actual subject from the other 'subjects', at the same time qualifying its relation to them in terms of primary predication. This mixed approach, however, is not necessary in order to explain (T1) and (T2), the Strong Interpretation being sufficient to explain both. The only advantage of this solution would consist in providing a way to account for the plural 'subjects' in Avicenna's *Burhān*. Regarding a section of Avicenna's *summa* different from the one analysed here, this problem is beyond the scope of the present paper; it is worth observing, however, that there could be other ways to explain the plural 'subjects' in *Burhān*: for example, assuming a developmental perspective⁶⁰. Future research is asked to settle this question.

⁶⁰ See EICHNER, *Al-Fārābī and Ibn Sīnā* cit. On the basis of a terminological analysis, Eichner suggests that parts of Avicenna's *Book of the Cure*, such as *Burhān*, II, 6, represent « an early 'stage' in the development of the wording of Avicenna's texts » (p. 90), being the re-working of an earlier logical treatise by Avicenna, although they belong to a relatively late work like the *Book of the Cure*. Moreover, Avicenna seems to draw on al-Fārābī in some cases (see above, n. 33). Eichner does not deal with the question of the plurality of subjects directly. However, the texts she collects about Avicenna's definition of 'subject' are interesting in this respect (pp. 89-90): among parallel passages from different works by Avicenna, some texts speak of 'subjects', in the plural, whereas others speak of 'subject', in the singular. The matter is worth further investigation. However, the following scenario would be possible: some texts belong to an earlier, 'Farabian' stage, marked by a loose notion of subject allowing the plural 'subjects'; the others to a later stage, marked by a rigorous notion of subject observing the uniqueness principle. Within the *Book of the Cure* itself, *Burhān*, II, 6 would thus belong to the first stage, while the *Ilāhiyyāt* would belong to the second one.

II. THE LATIN RECEPTION

II. 1. *Latin translation*

As is well known, Avicenna's *Book of the Cure* was not translated into Latin in its entirety. Most relevant to present purposes is the fact that, as far as the *Book of Demonstration* is concerned, only chapter II, 7 was translated⁶¹. As a consequence, Avicenna's treatment of primary predication, which proved to be essential for a full understanding of (T1) and (T2), was not available to Latin authors. Aristotle's *Posterior Analytics* were available in Latin translation, though, so that the connection could be seen between Avicenna's expression 'first subject' and Aristotle's notion of 'first'.

As for the Latin translation of (T2), there are no cases of double translations relevant to the understanding of the text. Moreover, the Latin translation faithfully conveys Avicenna's main points in (T2) — both as far as the edited Latin text and the text witnessed by manuscript P are concerned.

<i>Edited Latin text</i> (p. 13 ll. 36-46)	<i>Manuscript P</i>
Ideo primum subiectum huius scientiae est ens, inquantum est ens; et ea quae inquirunt sunt consequentia ens, inquantum est ens, sine condicione. Quorum quaedam sunt ei quasi species, ut substantia, quantitas et qualitas, quoniam esse non eget dividi in alia priusquam in ista, sicut substantia eget dividi in alia antequam perveniat ad dividendum in hominem et non hominem. Et ex his quaedam sunt ei quasi accidentalia propria, sicut unum et multum, potentia et effectus, universale et particulare, possibile et necesse. Per hoc autem quod ens recipit haec accidentia et coaptatur illis, non est necesse illud proprie fieri vel naturale vel disciplinale vel morale vel aliquid aliorum.	Igitur primum subiectum huius scientiae est ^a ens, inquantum est ens. Et ex consequentibus ens, inquantum est ens, sine condicione, quae ipsa inquirunt, quaedam sunt ei quasi species, ut substantia, quantitas, qualitas, quoniam esse non eget dividi in alia priusquam ista, sicut substantia eget dividi in alia antequam perveniat ad dividendum in hominem et non hominem. Et ex his quaedam sunt ei quasi accidentalia propria, sicut unum et multa, potentia et effectus, universale et particulare, possibile et necesse. Per hoc autem quod ens recipit haec accidentalia et coaptatur eis, non est necesse illud proprie fieri vel naturale vel disciplinale vel morale vel aliquod aliorum.

^a *Sup. lin. al. man.*

⁶¹ See R. STROBINO, *Avicenna's Kitāb al-Burhān, II.7 and its Latin Translation by Gundissalinus: Content and Text*, in this volume.

Therefore, the only peculiarity of the Latin translation worth considering in order to outline the reception of Avicenna's notion of 'first subject' is the case of 'false double translations' concerning (T1). It has already been seen that manuscript P witnesses the right translation of the Arabic text, while in the edited Latin text '*subiectum, quod est convenientius*' replaces '*subiectum primum*'. This implies that (T1) could suggest the meaning of the expression 'first subject' only to the reader of (T1) according to the text witnessed by P. However, establishing in a definitive way that an author could read only one text to the exclusion of the other is perhaps impossible. This is not only due to the possible possession by the reader of two manuscripts witnessing competing translations, but also to the possibility that a single manuscript bears competing translations⁶². Obviously, all this greatly complicates the picture of the reception of (T1).

II. 2. Duns Scotus on 'first subject'

To my knowledge, the expression 'first subject' is not systematically employed as having a proper epistemological meaning until Duns Scotus. Previous authors, as for example Albert the Great and Thomas Aquinas, had spoken about the 'first subject' of a science; however, they seem to employ the expression 'first subject' — at least in most cases — merely as synonymous with 'subject'⁶³.

As for Scotus, it is reasonable to maintain that he derives the expression 'first subject' from Avicenna. In the first question on the first book of the *Metaphysics*, he quotes (T2) as an argument *ex auctoritate* for the view, explicitly attributed to Avicenna at the beginning of the question, that being *qua* being is the subject of metaphysics:

Quaestiones super libros metaphysicorum, L. 1, Q. 1 (p. 19)⁶⁴

« Ad oppositum pro ente est Aristoteles IV huius in principio, ut videtur manifeste ex intentione, quod 'aliqua scientia speculatur ens in quantum ens', et illa non est

⁶² This can happen both in case this manuscript represents a possible original way double translations were transmitted (see Arnzen's hypothesis concerning 'real double translations' in the conclusions of ARNZEN, *Double Translations* cit.) and in case it is collated (see manuscript F in the critical edition of *Philosophia prima*).

⁶³ THOMAS AQUINAS, *In duodecim libros Metaphysicorum Aristotelis expositio*, edd. M.-R. CATHALA, R. M. SPIAZZI, Marietti, Torino - Roma, 1950, L. 4, lin. 17 (p. 203): « Philosophus enim primus debet disputare contra negantes principia singularium scientiarum, quia omnia principia firmantur super hoc principium, quod affirmatio et negatio non sunt simul vera, et quod nihil est medium inter ea. Illa autem sunt propriissima huius scientiae, cum sequantur rationem entis, quod est huius philosophiae primum subiectum ». As for Albert the Great, the matter is more complex; see below.

⁶⁴ DUNS SCOTUS, *Quaestiones super libros Metaphysicorum Aristotelis, Libri I-V*, edd. R. ANDREWS, G. ETZKORN, G. GÁL, R. GREEN, F. KELLEY, G. MARCIL, T. NOONE, R. WOOD, The Franciscan Institute, St. Bonaventure N. Y. 1997.

aliqua particularis. Avicenna libro I Metaphysicae cap. 2 d: "Primum subiectum huius scientiae est ens in quantum ens" ».

When coming to consider extensively the view that being *qua* being is the subject of metaphysics, Scotus includes the following argument among the ones supporting Avicenna's opinion:

Quaestiones super libros metaphysicorum, L. 1, Q. 1 (p. 39)

« Item, ad hoc videtur esse ratio: tum [...] Tum quia passiones hic consideratae — puta unum et multa, potentia et actus, et similia — non videntur esse alicuius determinati primo, sed cuiuslibet in quantum ens. Illud autem videtur primum esse subiectum et proprium cuius primo sunt passiones quae per se considerantur in scientia ».

The expression 'first subject' is explicitly linked to the idea that the attributes enquired into in a given science should belong primarily to the subject of that science.

In the *Ordinatio*, which is probably posterior to the texts of the *Questions on the Metaphysics* quoted above, Scotus explicitly draws the connection between the expression 'first subject' and Aristotle's notion of 'first' in *Posterior Analytics*, A, 4; moreover, in the *Reportata Parisiensia* one finds Aristotle's example of the triangle⁶⁵:

Ordinatio, Prol., Pars 3, Q. 3 (p. 96)⁶⁶

« [...] ratio primi obiecti est continere in se primo virtualiter omnes veritates illius habitus. [...] quia primitas hic accipitur ex I Posteriorum, ex definitione universalis, secundum quod dicit adaequationem [...] »

Reportatio I-A, Prol., q. 1, a. 2 (p. 5)⁶⁷

« Istud igitur recte dicitur scientiae primum subiectum, quia primo continet in se virtualiter notitiam pertinentium ad scientiam.

Additur autem 'primo' continere, quia, sicut illud quod non dependet ab alio sed alia ab ispo, est primum, ita illud dicitur primo continere quod non dependet ab

⁶⁵ I do not enter into details concerning Scotus' notion of 'first subject' of a science. See L. HONNEFELDER, *Ens in quantum ens. Der Begriff des Seienden als solchen als Gegenstand der Metaphysik nach der Lehre des Johannes Duns Scotus*, Aschendorff, Münster 1989, pp. 3-9.

⁶⁶ DUNS SCOTUS, *Opera Omnia*, vol. I. *Ordinatio*, Prologus, Typis Polyglottis Vaticanis, Civitas Vaticana 1950.

⁶⁷ DUNS SCOTUS, *The Examined Report of the Paris Lecture. Reportatio I-A. Latin text and English translation*, A. B. WOLTER O. F. M., O. V. BYCHKOV, The Franciscan Institute, St. Bonaventure NY 2004.

aliis in continendo nec per rationem alicuius alterius continet [...] Sicut verbi grati: isosceles continet virtualiter omnes conclusiones quas continet triangulus quia continet rationem trianguli. Sed non continet primo quia non per propriam rationem et specificam isoscelis sed per rationem trianguli».

To conclude, Scotus does not only derive from Avicenna the expression 'first subject', but he also understands the main idea behind Avicenna's expression by drawing the connection with Aristotle's *Posterior Analytics*, A, 4. However, this connection only allows for a partial understanding of Avicenna's notion of 'first subject', being limited to the relation between the subject and its proper accidents, to the exclusion of the relation between subject and species. Nonetheless, it is worth observing that Scotus seems to see that the expression 'first subject' in (T2) should refer also to the relation between the subject and the species enquired into in a science: he speaks about *primitas* and *adaequatio* in order to refer to this relation⁶⁸. A detailed analysis of Scotus' treatment of this point will not be provided here; however, it is clear that the notion he has in mind does not perfectly correspond to Avicenna's primary predication of the genus. This is not surprising, insofar as a full understanding of Avicenna's notion of 'first subject' would require acquaintance with Avicenna's treatment of primary predication in *Burhān*, II, 3, not available to Latin readers.

II. 3. *Albert the Great*

Even though the expression 'first subject' is perhaps not systematically used in its technical, epistemological meaning until Duns Scotus, Avicenna's notion of 'first subject' seems to have deeply influenced Albert the Great.

In this respect, the most interesting text is found in Albert's *Metaphysica*, L. 1, t. 1, c. 2. This is one of Albert's chapters most influenced by Avicenna: following *Ilāhiyyāt*, I, 1-2, Albert rejects the views that the causes or God can be the subject of metaphysics and states that this latter is rather being *qua* being. One of the arguments rejecting the causes as subject of metaphysics is the following:

⁶⁸ See the connection between 'first subject' and *adaequatio* in the text quoted from the *Ordinatio*. DUNS SCOTUS, *Quaestiones super libros metaphysicorum*, *Libri VI-IX*, edd. R. ANDREWS, G. ETZKORN, G. GÁL, R. GREEN, F. KELLEY, G. MARCIL, T. NOONE, R. WOOD, The Franciscan Institute, St. Bonaventure N. Y. 1997, L. 6, Q. 4 (pp. 87-88): «Secunda ratio confirmatur de adaequatione quam importat primitas. [...] Quando ergo omnibus consideratis in scientia est aliquod commune per praedicationem, illud adaequat». Actually, Scotus does not speak about species, but about things considered in a science. However, it is quite clear that it is the relation between being and the categories he has in mind here.

Metaphysica, L. 1, t. 1, c. 2 (p. 3, lin. 72-80)⁶⁹

« Similiter autem per se esse et per accidens, potentia et actus, unum et multum, idem et diversum, conveniens et contrarium, separatum et non-separatum et huiusmodi, quae sunt passionēs, quae subiecto istius scientiae universaliter et ubique probantur inesse, non sequuntur causam, inquantum causa aut inquantum est prima. Et cum passio immediata sit subiecto in scientia omni, non potest esse causa subiectum scientiae istius ».

Comparing Albert's text with Avicenna's argument in (T1), one sees an evident structural difference: Albert does not suppose, as Avicenna does, that metaphysics enquires into the accidents belonging to causes inasmuch as they are existent, in order to conclude that the first subject should be the existent; rather, he assumes that metaphysics enquires into certain definite accidents, in order to conclude that they do not belong to causes inasmuch as they are causes. However, the main idea behind the two arguments seems to be the same: the accidents enquired into in a science must belong to the subject as such⁷⁰. Avicenna conveys this idea in terms of 'firstness' of the subject; in a similar vein, Albert states that the attribute must be immediate with respect to the subject⁷¹. Moreover, it is noteworthy that Albert makes *explicit* — albeit with a different expression — Avicenna's *implicit* principle that the subject must be first with respect to the accidents enquired into in a science. He does so again in

⁶⁹ ALBERTUS MAGNUS, *Metaphysica, Libri I-V*, ed. B. GEYER, Alberti Magni Opera Omnia, t. XVI, p. I, Aschendorff, Münster 1960.

⁷⁰ It is worth observing that Albert does not say that the accidents enquired into in metaphysics do not follow upon the cause absolutely, but that they do not follow upon the cause *qua* cause. The same kind of argument is also used by Albert to reject the view that God is the subject of metaphysics. *Metaphysica*, L. 1, t. 1, c. 2 (p. 4, lin. 47-50): « Adhuc passionēs in hac scientia consideratae, quae supra inductae sunt, non consequuntur immediate deum et divina; igitur subiectum non potest deus huius esse scientiae ». Leaving aside what Albert calls *divina*, whether metaphysical attributes follow upon God at all — albeit not immediately — is a question linked to the problem of the relation between God and the subject of metaphysics, which will not be dealt with here. For an overview of the problem, together with an attempt to answer it and further references, see T. B. NOONE, *Albert the Great's Conception of Metaphysical Knowledge*, in I. M. RESNICK ed., *A Companion to Albert the Great. Theology, Philosophy and the Sciences*, Brill, Leiden 2013, pp. 685-704.

⁷¹ In one passage, Albert seems to link the expression '*subiectum primum*' to the expression '*immediate*'. *Metaphysica*, L. 3, t. 3, c. 6 (p. 145, lin. 2-4): « [...] sed cognoscit de his quae fluunt immediate ab ente, quod est subiectum primum [...] ». On the other hand, the former is used independently of the latter as well. *Metaphysica*, L. 4, t. 1, c. 3 (p. 165, lin. 17-26): « Sic enim unum genus vocamus, quod est unum et primum subiectum, ad quod alia quocumque modo omnia referuntur. Palam igitur est de ente omni esse scientiam unam ut de subiecto [...] Et haec eadem est de speciebus entis omnibus et specierum speciebus, secundum quod ad ens primum sicut ad unum subiectum quocumque modo referuntur ».

the following chapter, where the very unity of a science is said to depend on the relation of immediate-ness between subject and accidents⁷².

The fact that Avicenna's notion of 'first subject' corresponds, as far as accidents are concerned⁷³, to Albert's 'immediate-ness' is confirmed by Albert's commentary on *Posterior Analytics*, A, 4, where the equivalence between the expressions 'first subject' and 'immediate subject' is implied:

Analytica posteriora, L. 1, t. 2, c. 12 (p. 48)⁷⁴

«Universale autem tunc esse dicitur in demonstrativis secundum inductam determinationem, cum demonstratur esse in quolibet, hoc est, in qualibet parte subjecti: quia aliter non esset de omni: et monstratur primo, hoc est, immediate inesse cuilibet per subjectum primum. Et sic primum est quod inter ipsum et passionem aliud subjectum non intercidit [...]

[...] sed isosceles habet quidem fortasse duobus rectis aequales tres angulos, sed non habet tres primum sive primo vel primitus, hoc est, sicut immediatum subjectum ex quo tota illa fluit passio. [...] Primum autem dico: quia isosceles non est primum sive immediatum subjectum passionis secundum se totius [...].»

All this considered, Albert's argument against the causes as subject of metaphysics would seem to be derived from (T1). In particular, Albert would seem to understand keenly the meaning of 'first subject' and to convey it by speaking of immediate attributes⁷⁵. However, this picture is only possible on the assumption that Albert reads the Latin text as witnessed by manuscript P.

⁷² *Metaphysica*, L. 1, t. 1, c. 3 (p. 5, lin. 77-81): «Alia autem unitate unitur ad passiones, et haec est immediatio substandi passionibus, quae insunt ei, sicut quaelibet unitur scientia, et tantum extenditur illa unitas, quantum extenditur immediatio subiecti ad quascumque passiones».

⁷³ There is at least one passage where Albert may apply the notion of 'immediate-ness' to species as well; anyway, he does not make explicit what this would amount to. *Metaphysica*, L. 3, t. 3, c. 1 (p. 139, lin. 44-55): «Sicut enim in antehabitis diximus, in una et eadem scientia diversi sunt modi sciendi, ita quod primum subiectum, quod prius se non habet, ex posterioribus, quae potestate sunt in ipso, scitur per divisionem, eo quod per priora sciri non potest. Et partes eiusdem subiecti, quae priora se habent, sciuntur per diffinitionem, et passiones tam subiecti quam partium subiecti per collectivam sive syllogisticam demonstrationem sciuntur. Sed secundum hoc scientia non est effectus demonstrationis sive habitus conclusionis tantum, sed est habitus omnium eorum quae ad idem immediate ordinantur». Observe that the expression '*primum subiectum*' could be independent of the expression '*immediate*', being just synonymous with '*subiectum*' or referring to the fact that the subject is prior to its parts.

⁷⁴ ALBERTUS MAGNUS, *Analytica Posteriora*, ed. A. BORGNET, Opera Omnia, vol. II, Vivès, Paris 1890.

⁷⁵ Observe that this is problematic. It has been said that Aristotle's notion of 'first' should apply to the subject of an accident whose inherence is demonstrated, while Aristotle's immediate propositions are indemonstrable premisses. Albert uses the adjective 'immediate' in both cases. Cf. ALBERTUS MAGNUS, *Analytica Posteriora*, L. 1, t. 2, c. 2.

On the contrary, Albert seems to rely on the edited Latin text for a quotation from *Philosophia prima*, IV, 2 in *Metaphysica*, L. 5, t. 2, c. 16⁷⁶. Examining other quotations of Avicenna's *Philosophia prima* in Albert's works, future research will be in a better position to evaluate the possibility that Albert could read (T1) as witnessed by manuscript P.

CONCLUSIONS

Avicenna's expression 'first subject' refers to the same thing as the expression 'subject' does. However, the two expressions are not merely synonymous. Avicenna employs 'first subject' — at least in his *Ilāhiyyāt* — when he needs to underscore a given property of the subject of a science, namely its 'firstness' with respect to the species and to the accidents enquired into in that science. Such concept of 'firstness' derives from *Posterior Analytics*, A, 4, but Avicenna's re-working in *Burhān*, II, 3 is necessary in order to apply it beyond the domain of accidents, qualifying the relation between the subject and given species. Moreover, Avicenna's texts do not only introduce the notion of 'first subject', but also suggest, albeit implicitly, an epistemological principle which an item must observe in order to be the subject of a science, namely: something is the subject of a science if and only if it is 'first' with respect to the species as well as to the accidents enquired into in that science.

Avicenna's two main texts on the issue in the *Ilāhiyyāt* — (T1) and (T2) — were translated into Latin together with the rest of the work. While the Latin translation of (T2) is not problematic, in (T1) a case of 'false double translations' is found concerning the very expression 'first subject'. Despite this problem concerning one of the two main pieces of textual evidence, Avicenna's original notion of 'first subject' seems to have passed into Latin philosophy, influencing Latin authors such as Albert the Great and Duns Scotus. They understand what Avicenna means by 'first subject' as far as one side of the issue, i. e. the relation between subject and accidents, is concerned, by linking this expression to Aristotle's *Posterior Analytics* A, 4, as Avicenna did. Moreover, they explicitly state Avicenna's implicit epistemological principle recalled above. The other side of the issue, namely the relation between subject and species that Avicenna has in mind, probably remained opaque to them, due to the lack of a Latin translation of Avicenna's treatment of the topic in his re-working of the *Posterior Analytics* within the *Book of the Cure* (*Burhān*, II, 3).

⁷⁶ This point has been shown by Amos Bertolacci in A. BERTOLACCI, «*Subtilius speculando*». *Le citazioni della Philosophia Prima di Avicenna nel Commento alla Metafisica di Alberto Magno*, «Documenti e studi sulla tradizione filosofica medievale», 9, 1998, pp. 261-339. See pp. 305-308.

APPENDIX 1. ON THE SIGNIFICANCE OF THE 'FIRST SUBJECT' EPISTEMOLOGICAL PRINCIPLE

As already underscored, Avicenna's texts imply the principle according to which something can be the subject of a science only if it is 'first' with respect to the species as well as to the accidents enquired into in that science. Both this principle and the resulting notion of 'first subject' can be considered as Avicenna's own epistemological innovations in the history of philosophy. However, one could wonder whether this principle is correct at all, i. e. whether it is reasonable to require that the subject of a science be 'first'. Since species and accidents can be considered independently of each other, the questions are actually two: 'Is the principle correct as far as species are concerned?'; 'Is the principle correct as far as accidents are concerned?'. Consequently, the possible answers to the main question are four: (i) yes/yes; (ii) yes/no; (iii) no/yes; (iv) no/no. I would argue for the correctness of the principle for species as well as for accidents, i. e. I would incline towards answer (i):

(Species) Suppose $S_1...S_n$ are all the (mutually exclusive) species enquired into by a science and G is the subject of that science. Hence there are $G_1...G_m$ such that: G is the primary genus of all and only $G_1...G_m$; for every i , there is j such that $S_i = G_j$ or S_i is one of the species of G_j . There are two cases. (1) $S_1...S_n$ cover the whole extension of G . Then enquiring into $S_1...S_n$ is eventually the same as enquiring into $G_1...G_m$, whose primary genus is G , namely the subject. (2) $S_1...S_n$ do not cover the whole extension of G . This case is in turn divided into two sub-cases. (2a) There is some j such that $S_1...S_n$ are all species of G_j . Then there would be no reason for G to be chosen as the subject rather than G_j ; moreover, choosing G as the subject would commit the science to enquire into the whole of G , against the assumption that $S_1...S_n$ are all the species enquired into. The subject could only be G_j , against the assumption that it was G . (2b) $S_1...S_n$ are not all species of a unique G_j . Then the only genus encompassing all $S_1...S_n$ would be G . However, the science whose subject is G should also enquire into a species different from each of $S_1...S_n$, against the assumption that $S_1...S_n$ are all the species enquired into. Consequently, there would be no science enquiring into all and only $S_1...S_n$.

(Accidents) If a science should not enquire only into the primary proper accidents of its subject, there would be no distinction of sciences at all. For example: metaphysics should enquire into the accidents belonging to its subject inasmuch as it is specified as mathematical, namely into the primary proper accidents of mathematical quantity; on the other hand, if necessary concomitants are taken into account, mathematics should enquire into the necessary concomitants belonging to its subject inasmuch as it is existent, namely into the primary necessary concomitants of the existent. Consequently, there would be only one discipline rather than different sciences. According to

Avicenna, this discipline would rather be dialectics or sophistics⁷⁷; anyway, it would not be philosophical, falling short of the epistemological requirements prescribed for science.

APPENDIX 2. AVICENNA ON THE ACCIDENTS OF THE EXISTENT

In several passages of *Ilāhiyyāt*, I, 2, Avicenna states that certain attributes are accidents — or proper accidents — of the existent. Despite never employing the expression ‘primary proper accidents’ in *Ilāhiyyāt*, I, 2⁷⁸, it is clear that Avicenna refers to primary proper accidents when he generically speaks about proper accidents of the existent and — even more generically⁷⁹ — about accidents of the existent.

Three passages are worth mentioning. One of them is the last section of (T2):

Ilāhiyyāt, I, 2 (p. 13, lin. 16-19)

«And some of these are like its⁸⁰ proper accidents, such as the one and the many, potency and act, the universal and the particular, the possible and the necessary. Indeed, in order to receive these accidents and to be prepared for them, the existent does not need to be specified as natural, mathematical, ethical or something else ».

It has already been shown that Avicenna’s main goal in the quoted passage is to state the primary-ness of the accidents which are listed: to this end, he underscores the fact that the existent does not need to be specified in order to receive them.

The scope of the other two passages is wider and more features of primary proper accidents are mentioned. In the first one, Avicenna means to show that the common notions are proper accidents of the existent:

Ilāhiyyāt, I, 2 (p. 13, lin. 3-7)

«[1a] [These things] are not proper accidents of any of the subjects of these particular sciences, [1b] nor are they [any] of the things whose existence is but

⁷⁷ Cf. *Ilāhiyyāt*, I, 2 (p. 16, lin. 15-17). Actually, Avicenna states that the metaphysician (*qua* metaphysician) does not deal with the questions of particular sciences, while the dialectician and the sophist do.

⁷⁸ Nor in any other chapter in the *Ilāhiyyāt*. See BERTOLACCI, *The Reception* cit., pp. 613-616 (Appendix F – The terminology for ‘property’ in the *Ilāhiyyāt*).

⁷⁹ By saying ‘even more generically’, I only refer to a conceptual distinction, since all the accidents of the existent cannot but be proper accidents.

⁸⁰ Bertolacci: *add. lahū* (BERTOLACCI, *The Reception* cit., p. 490).

the existence of the attributes of the essences (*wa-laysat min al-umūri llatī yakūnu wuḡūduhā illā wuḡūda l-ṣifāti li-l-dawāti*). [1c] They are not [any] of the attributes which belong to every thing either ([in which case] each one of them would be common to every thing), [1d] nor is it possible that they are proper to a [single] category. [1e] It is not possible that they are [any] of the accidents of something but of the existent inasmuch as it is existent ».

The passage is not completely perspicuous, both in its overall structure and about some of its details (in particular, it is not immediately clear the meaning of [1b] and the role of [1c]).

In the second passage, Avicenna means to show that 'being a principle' is a proper accident of the existent. To this end he argues thus:

Ilāhiyyāt, I, 2 (p. 14, lin. 3-8)

«[2a] The answer to this is that also the investigation of the principles is an examination of the accidents of this subject, [2b] because the fact that the existent is a principle is not constitutive of it [i. e. of the existent], [2c] nor is it impossible about it. [2d] Rather, with respect to the nature of the existent, it is something accidental to it. [2e] And it is [one] of the accidents proper to it, [2f] because there is nothing more common than the existent, so that it could primarily attach to something else [i. e. other than the existent]; [2g] nor does the existent need to become physical, mathematical or something else, in order that being a principle belongs to it ».

The steps of the argument are clearer than the ones of the first passage. However, it is useful to highlight the overall meaning and the unity of the argument, especially because this could help to clarify the first passage, whose goal is expressly the same.

The two passages are similar inasmuch as both aim to show that some attributes are primary proper accidents of the existent by means of the same kind of reasoning, namely by denying that they are something else. Therefore, in order to understand the argument, it is necessary to identify which alternatives are to be ruled out.

An attribute which is a primary proper accident of a given subject must fulfill the primary-ness condition concerning proper accidents: proper accidents which are not primary are to be ruled out. However, before ascertaining the fulfillment of the primary-ness condition, it is necessary to ascertain that such an attribute is a proper accident: all other predicables are to be ruled out (cf. the table in section I.4). Going into details, a primary proper accident of a given subject must be:

i) an accident — which in turn implies that it must be (a) inherent in the subject (so as to rule out attributes which cannot be predicated at all of the subject) and (b) non-essential⁸¹ to it and to its species (so as to rule out genus and differentia — both constitutive and divisive);

ii) proper (so as to rule out non-proper accidents, which are predicated of something not falling within the subject);

iii) non-coextensive with the subject (so as to rule out necessary concomitants);

iv) primary (so as to rule out non-primary proper accidents).

The following table is an attempt to read the quoted texts according to this framework:

Thesis	1e	2a, 2d, 2e ^a
i-a) Inherent	---	2c
i-b) Non-essential	1b	2b
ii) Proper	---	2f
iii) Non-coextensive	1c	---
iv) Primary	1a, 1d	2g

^a I prefer to distinguish between [2d] and [2e], insofar as [2e] could be meant to state something stronger than [2d]. In particular, it is possible to consider [2d] as the conclusion of [2b] and [2c], while [2e] would require also [2f] and [2g] in order to be proved.

As the table shows, both passages are incomplete. In the second text, the fact that ‘being a principle’ is not coextensive with the existent is not explicitly stated. The several sections of the text make the following points: [2b] ‘being a principle’ is not constitutive of the existent, namely: it is not essential to it; [2c] it is possible that the existent be a principle, namely: ‘being a principle’ can inhere to the existent; [2f] there is nothing more common than the existent, which implies that ‘being a principle’ cannot but be proper to the existent⁸²; [2g] ‘being a principle’ is a primary proper accident, inasmuch as it fulfills the primary-ness condition.

In the first text, Avicenna does not explicitly state that the attributes he is considering are proper to the existent, nor does he state that they can inhere to the existent. As for the difficult phrase in [1b], I am not entirely sure of its

⁸¹ Here and in what follows I mean ‘essential’ as synonymous with ‘constitutive’.

⁸² The text could seem to suggest that [2f] concerns the fulfillment of the primary-ness condition («...so that it could primarily attach to something else»). However, this is not the case. [2f] only states that ‘being a principle’ is proper to the existent. If something is a proper accident of A, it cannot be a primary proper accident of anything more common than A. This does not amount to saying that it is a primary proper accident of A.

exact meaning. However, it seems to me that the best way to explain its role within the argument is to read the expression *al-ṣifāt li-l-ḍawāt* as meaning 'essential attributes' — in other words, Avicenna would not refer to attributes attaching to essences, but to attributes which are 'of the essences' inasmuch as they enter within the essences⁸³. In [1c] the possibility is ruled out that the attributes in question are necessary concomitants of the existent, since they are not as common as the existent. Finally, [1a] and [1d] are meant to state the fulfillment of the primary-ness condition: Avicenna denies that these attributes can be proper accidents of the subject of a particular science (in which case they would be enquired into by such particular science) and that they can be proper accidents of a single category (in which case the subject of the science enquiring into them would be such category).

⁸³ If this is correct, [1b] would have the same role as [2b] in the other text. However, while [2b] only denies that 'being a principle' is essential to the existent, [1b] refers to 'essences' in the plural. It is plausible to read [1b] as denying that the attributes taken into account are essential to the subjects of particular sciences (which implies that they are not essential to the existent either).

ABSTRACT

Avicenna's Notion of al-mawḍū' al-awwal ('first subject') in Ilāhiyyāt, I, 1-2 and its Latin Reception

Scholarship has recently underscored the relevance of Avicenna's achievements concerning the epistemological structure of metaphysics, as well as their deep influence on Latin medieval philosophy. In this paper, I focus on Avicenna's original epistemological notion of 'first subject of science'. The paper falls into two parts. In the first one, I determine the exact meaning of the expression 'first subject' as it is employed in *Ilāhiyyāt*, I, 1-2. In the second part, the Latin reception of the Avicennian notion is investigated taking into account the Latin translation of Avicenna's work in order to explain how and to which extent Latin authors could and actually did understand the Avicennian notion of 'first subject'.

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The Latin Translation and the Original Version of the *Ilāhiyyāt (Science of Divine Things)* of Avicenna's *Kitāb al-Šifā* *

The Latin translation of the *Ilāhiyyāt (Science of Divine Things)*, namely of the metaphysical section of Avicenna's *Kitāb al-Šifā* ' (*Book of the Cure*, or: *of the Healing*, according to another possible interpretation of the key-term of the title), is not the specular image of the Arabic text of the work¹. This translation — penned in all likelihood in Toledo in the second half of the XII century, ascribed to Dominicus Gundissalvi or Gundissalinus in some Latin manuscripts, and edited by Simone Van Riet between 1977 and 1983 with the title *Liber de Philosophia Prima sive Scientia Divina* (henceforth: *Philosophia prima*) — differs from the Arabic text available in the standard printing published in Cairo in 1960 in a few respects². Since the Latin translation is among the most ancient extant witnesses of the *Ilāhiyyāt* presently available — more precisely, it is one

* This article gathers the provisional results of the research conducted in the project 'Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the Metaphysics (*Ilāhiyyāt* of *Kitāb al-Šifā*) of Avicenna (Ibn Sīnā)' (Acronym 'PhiBor', 2014-2019), financed by the European Research Council (www.avicennaproject.eu). I am particularly grateful to Tommaso Alpina (Scuola Normale Superiore, Pisa) for his invaluable help in gathering the data presented here, and to Roland Hissette (Thomas-Institut, Cologne) for his keen observations on a draft of the present paper. My gratitude goes also to M. Aouad and M. Sebtī, and A. Speer and D. Wirmer, organizers of the meetings 'Journée d'étude dans le cadre du séminaire *Recherches en cours sur la falsafa*' (CNRS, Centre Jean Pepin, UPR 76, Villejuif, 21 November 2012), and 'Averroes und die arabische, hebräische und lateinische Rezeption der aristotelischen Naturphilosophie' (University of Cologne, 2 December 2016), for having invited me to present topics related to this article, and to all the participants for their comments. I wish to thank warmly the two anonymous referees for their precious remarks.

¹ AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina*, I-IV. Édition critique par S. VAN RIET. Introduction par G. VERBEKE, Peeters - Brill, Louvain - Leiden 1977; AVICENNA LATINUS *Liber de Philosophia prima sive Scientia divina*, V-X. Édition critique par S. VAN RIET. Introduction par G. VERBEKE, Peeters - Brill, Louvain - Leiden 1980; AVICENNA LATINUS *Liber de Philosophia prima sive Scientia divina*, I-X. Lexiques par S. VAN RIET, Peeters - Brill, Louvain-la-Neuve - Leiden 1983 (pp. 6*-14*: *addenda et corrigenda* regarding the previous two volumes).

² IBN SĪNĀ, *Al-Šifā*, *al-Ilāhiyyāt* (1), edd. Ġ. Š. QANAWATĪ, S. ZĀYID, al-Hay'a al-'amma li-šū'ūn al-maṭābi' al-amīriyya, Cairo 1960; IBN SĪNĀ, *Al-Šifā*, *al-Ilāhiyyāt* (2), edd. M. Y. MŪSĀ, S. DUNYĀ, S. ZĀYID, al-Hay'a al-'amma li-šū'ūn al-maṭābi' al-amīriyya, Cairo 1960.

of the sixth oldest surviving testimonia of the work currently known³ — any peculiarity of its text is worth special attention.

By comparing the edition Van Riet of the *Philosophia prima* and the Cairo printing of the Arabic text, one notices two major differences. First, the last two chapters of the work, which are a sort of appendix on practical philosophy with many Islamic underpinnings, are summarized rather than translated into Latin, differently from what the translator does with the rest of the work, whose translation is very literal. This first difference is, in all likelihood, intentional⁴, although the reasons behind the translator's choice of summarizing rather than translating chapters X.4-5 can be various (for example, the awareness that these chapters, though appended by Avicenna to metaphysics, were extraneous to this discipline; the reluctance to convey non-Christian, i.e. distinctly Islamic, notions and ideas; the inability to translate unfamiliar Islamic tenets or the intention of sparing the readers notions and ideas hardly understandable by them, etc.)⁵.

The second main difference of the *Philosophia Prima* with respect to its Arabic counterpart, on the contrary, does not seem to be imputable to the translator's intervention, since — contrary to the first one — it regards a topic surely belonging to metaphysics, with no direct religious implication: it is the disposition of chapters in the fifth treatise of the work, dealing with universals, and the resulting order of exposition of topics regarding this theory. This variation is shared by both the so-called 'Ancient text' and 'Revised Text' of the *Philosophia Prima* distinguished by Van Riet, and does not seem to be involved in the phenomenon of 'double translations' that affects otherwise single terms or

³ See the Appendix, below. It is worth remarking that the Latin translation (second half of the XII c.) represents only the *terminus ante quem* for the dating of its Arabic exemplar, and that nothing prevents this latter to stand higher in the chronological classification of witnesses.

⁴ No Arabic manuscript known to date summarizes in the same way the text of the last two chapters of the work.

⁵ See S. DI DONATO, *I traduttori di fronte alle citazioni coraniche: errori ed estraneità culturale. Il caso di un trattato di Averroè*, in J. HAMESSE, O. WEIJERS éds., *Écriture et réécriture des textes philosophiques médiévaux. Volume d'hommage offert à Colette Sirat*, Brepols, Turnhout 2006, pp. 45-61; D. N. HASSE, *Abbreviation in Medieval Arabic Translations from Arabic*, in R. WISNOVSKY, F. WALLIS, J. C. FUMO, C. FRAENKEL eds., *Vehicles of Transmission, Translation, and Transformation in Medieval Cultures*, Brepols, Turnhout 2011, pp. 159-172. Also in his *De scientiis*, Gundisalvi — the probable translator of the *Ilāhiyyāt* — abridges the part of Fārābī's *Iḥṣā' al-'ulūm* (*Catalogue of the Sciences*) most involved with Islamic issues (political sciences and jurisprudence are shortened, whereas dialectical theology is totally omitted). One may wonder whether Gundisalvi's ecclesiastic capacity of canon, or the bishop of Toledo's sponsorship of the Latin translation of the *Šifā'*, played any role in this tendency to omit the Islamic elements of Avicenna's discourse. The contention «Dominicus Gundisalvi ... did not abbreviate in any significant manner» (D. N. HASSE, *Latin Averroes Translations of the First Half of the Thirteenth Century*, Georg Olms Verlag, Hildesheim - Zürich - New York 2010, p. 37) applies, of course, to the parts of his translations that are *verbatim* translations, rather than abridgements.

phrases of the translation⁶. In other words, all Latin witnesses of the *Philosophia Prima* presently known convey the variation at stake, and its origin cannot be imputed to any stage of the transmission history of the Latin translation itself. This is the only 'structural' variation of the roster of chapters within a treatise of the *Ilāhiyyāt* that one finds in the Latin translation, and appears to be rooted in the Arabic background of the translation, as we are going to see. The present contribution deals with this second difference. For the sake of convenience, I label 'Versio Latina' the outlook of treatise V that the Latin translation exhibits. The term of comparison is the content of Treatise V that one can read in most of the manuscripts and in all the Arabic printings of the *Ilāhiyyāt*, which I call 'Versio Vulgata'.

I have already documented elsewhere that the Latin translation witnesses a version of the structure of treatise V of the *Ilāhiyyāt* remarkably different from the one transmitted by the Versio Vulgata, and that some Arabic testimonia attest alternative structural variations of this same treatise⁷. In this previous contribution, I advanced the hypothesis that at least some of the variations taken into account — all of which look deliberate, rather than accidental — might amount to distinct stages of composition and diffusion (what I called, for the sake of brevity, 'recensions') of the work, as is the case with other writings of Avicenna⁸; that Avicenna did not necessarily authored all the documented versions of treatise V, so that some accounts of the structure of this treatise might not be due to him; and that the non-authorial versions of treatise V possibly originated in Avicenna's *atelier*, with particular regard to the role played therein by the secretary and biographer of Avicenna, Abū 'Ubayd al-Ġūzġānī.

The aim of the present article is to corroborate, widen, and refine the outcomes of previous research in three directions. First, by showing that among the structural variations of the Versio Vulgata of treatise V of the *Ilāhiyyāt* known to date, the Versio Latina is the most relevant. Second, by enlarging

⁶ On the issue of the precise nature and correct interpretation of the phenomenon of 'double translations' in the *Philosophia Prima* and in the other parts of the Avicenna Latinus, see the article by R. Arnzen in the present volume.

⁷ A. BERTOLACCI, *How Many Recensions of Avicenna's Kitāb al-Šifā'?*, « Oriens », 40/2, 2012, pp. 275-303. The Latin translation is taken into account on pp. 287-290.

⁸ The treatise *Fī l-Aġrām al-'Ulwiyya* (*On the Supernal Bodies*) whose two recensions are documented in D. GUTAS, *The Study of Avicenna. Status Quaestionis atque Agenda*, « Documenti e studi sulla tradizione filosofica medievale », 21, 2010, pp. 45-64 (esp. pp. 60-61; cf. BERTOLACCI, *How Many Recensions* cit., p. 276, n. 1), is not an unique case: see, for instance, the multiple recensions of Avicenna's commentary on the *Theology of Aristotle* (AVICENNE, *Commentaire sur le livre Lambda de la Métaphysique d'Aristote*, edd. M. GEOFFROY, J. JANSSENS, M. SEBTI, Vrin, Paris 2014) and of Avicenna's work on phonetics mentioned by A. BAUSANI, *L'enciclopedia dei fratelli della purità. Riassunto, con Introduzione e breve commento, dei 52 trattati o Epistole degli Ikhwān aş-şafā'*, Istituto Universitario Orientale, Napoli 1978, p. 196.

the evidence that points at the existence of an Arabic counterpart of the Versio Latina. Third, by suggesting that the tendencies of Avicenna's school during the master's lifetime and shortly afterwards can shed light on why and by whom the account of the structure of treatise V of the *Ilāhiyyāt* originally devised by Avicenna might have been modified, strengthening the hypothesis of an intervention by Avicenna's direct disciples in general, and of al-Ġūzġānī in particular. On all these accounts, we are now in a better position to evaluate the relationship of the Versio Vulgata with the Versio Latina, both in a chronological and in a genetic perspective, and to formulate some sensible hypothesis on their respective positions in the compositional history of the *Ilāhiyyāt*.

I divide the exposition into three parts. In the first, I summarize preliminarily the outlook of treatise V in the Versio Vulgata. In the second, I take into account how treatise V is structured in the Versio Latina, according to the Latin translation and the various Arabic testimonia of this way of structuring it. In the third, I discuss a series of interrelated issues. About some of them I am more positive, arguing (i) that the Versio Latina is probably more original than the Versio Vulgata; (ii) that the Versio Vulgata might respond to a deliberate intention to make the content of treatise V more compliant with the account of universals provided by Avicenna himself in the logic of the *Šifā'* and, in general, with the traditional pre-Avicennian ways of expounding the doctrine of universals; (iii) and that the Versio Vulgata was arguably the product of Avicenna's school, as the result of shared concerns and theoretical debates that prompted the decision of modifying Avicenna's original text through the intervention, in all likelihood, of al-Ġūzġānī. I am more dubitative, instead, about some further issues, namely (iv) how precisely the Latin translation relates to the Arabic background from which it stems, (v) and whether the Versio Latina can be taken as the outlook of treatise V intended and licensed by Avicenna, or it also conveys elements of later, non authorial modifications with regard to the original plan of the treatise. The Appendix contains a list of the earliest extant dated Arabic manuscripts of the *Ilāhiyyāt* of Avicenna's *Kitāb al-Šifā'* in the first two centuries of its manuscript transmission (V-VI/XI-XII c.), among which the exemplar of the Latin translation should be included.

I. THE VERSIO VULGATA

In the current printing of the *Ilāhiyyāt*, published in Cairo in 1960, the fifth treatise of the work consists of nine chapters, whose content is summarized in their respective titles. Whereas the text of the titles — in this case, as in the rest of the work — comes in all likelihood from Avicenna, the precise way of numbering the chapters in the Cairo printing is largely due to the editors'

intervention⁹. Numeration apart, the amount and order of chapters of treatise V that the Cairo printing conveys is attested by the majority of codices: beside the manuscripts used by the Cairo editors and the Tehran lithograph of 1885, it is also found in a variety of other manuscripts, some of which are quite ancient. This surely justifies calling ‘Versio Vulgata’ the outlook of treatise V that one finds in the Cairo printing.

Treatise V in the Versio Vulgata

V.1: Chapter on common things [= universals] and the modality of their existence (pp. 195-206)

V.2: Chapter on the modality according to which universality belongs to universal natures (completion of the discussion of this [topic]) and on the difference between whole and part, universal and particular (pp. 207-212)

V.3: Chapter on the distinction between genus and matter (pp. 213-219)

V.4: Chapter on the modality according to which the notions external to the genus enter into its nature (pp. 220-227)

V.5: Chapter on the species (pp. 228-229)

V.6: Chapter on determining and ascertaining the differentia (pp. 230-235)

V.7: Chapter on determining the relationship between the definition and the thing defined (pp. 236-242)

V.8: Chapter on the definition (pp. 243-247)

V.9: Chapter on the relationship between the definition and its parts (pp. 248-252)

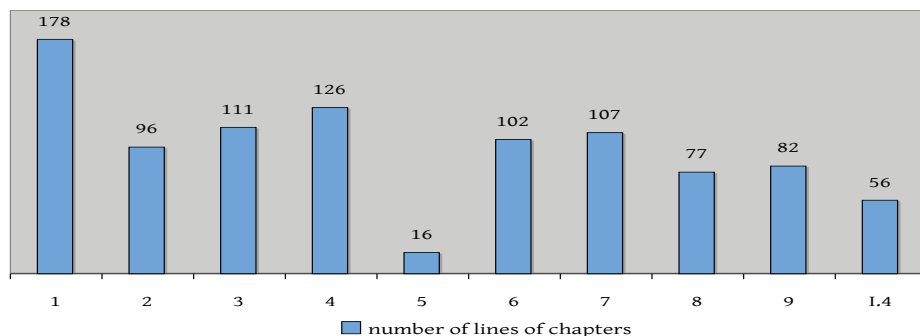
⁹ The Cairo editors place two kinds of numeration before each of the chapters of treatise V (as well as of the other treatises of the *ilāhiyyāt*): first, they report between square brackets the term ‘chapter’ (*faṣl*) followed by an ordinal number written in letters (only in the case of chapter V.7 the square brackets are absent, possibly because of a misprint); second, they add between round brackets a cardinal numeration by means of the *abjad* system (on this system of numeration, see A. GACEK, *Arabic Manuscripts. A Vademecum for Readers*, Brill, Leiden 2009, pp. 11-13); finally, they report again the term ‘chapter’ and the corresponding title. The first type of numeration (without square brackets) is adopted in some places of the Tehran lithograph of the *ilāhiyyāt* published in 1885 and used in the Cairo printing (see, for example, chapters I.1 and I.2). The second kind of numeration is attested, without round brackets, in ms. Cairo, Maktabat al-Azhar al-Šarīf, Beḥīṭ 331 *falsafa*, also used in the Cairo printing: it is placed above the various occurrences of the term ‘chapter’ followed by the corresponding title (see for instance, chapters V.1 and V.2). These two kinds of numeration, however, are not frequently attested in the text of manuscripts, where often only the term ‘chapter’ and the corresponding title appear; they occur, in various extents, in the lists of chapters occasionally added to the text of the *ilāhiyyāt* in manuscripts, or in numerations appended to the single chapters in the margins. Other codices place cardinal consecutive Arabic numerals, not *abjad* letters, above the various occurrences of the term ‘chapter’ in the text (see, for instance, ms. London, India Office [now: British Library, Oriental and India Office Collections], Islamic 1811).

The structure of the treatise at stake in the *Versio Vulgata* looks *prima facie* straightforward: two introductory chapters (V.1-2), regarding universals in general, are followed by a series of chapters dealing with the universals that constitute the essence of things, namely genus (V.3-4), species (V.5) and differentia (V.6); the last three chapters (V.7-9), on the other hand, focus on issues concerning the definition. Whereas chapters V.1-6 are the resumption and the ontological ‘foundation’ in metaphysics of topics already discussed in the logical part of the *Šifā*’ (especially, in the first section of logic, which corresponds to Porphyry’s *Isagoge*), the last two chapters (V.8-9) are Avicenna’s reformulation of themes expounded by Aristotle in *Metaphysics*, book Zeta, chapters 4-6, 10, and 15¹⁰.

On closer inspection, however, the arrangement of the nine chapters of the fifth treatise is less coherent than it may seem at first sight. In particular, three structural problems emerge. (a) First, chapter V.5 is unexpectedly very short (less than one page and half, i.e. sixteen lines, in the Cairo edition), being in this way the shortest chapter of the treatise. Since it is pivotal in the layout of the treatise because of its centrality, and considered the importance of its topic, as expressed by its title (the species, namely the most important of the essential universals), one would expect this chapter to be much lengthier. The impression of an anomalous shortness is confirmed by the comparison of chapter V.5 with the chapters of the rest of the work: chapter V.5 is by far the shortest chapter not only of treatise V, but also of the *Ilāhiyyāt* in its entirety: more precisely, it ranges over less than one third of the extent of the chapter that follows it in the rank of shortness, i.e. chapter I.4, which covers fifty-six lines. It should be recalled, however, that chapter I.4 is an introductory chapter devoted to summarize preliminarily the content of the *Ilāhiyyāt*; its relative shortness, therefore, is not at all surprising. The exceptional brevity of chapter V.5, by contrast, is incongruous with the average length of the chapters of treatise V and of the other chapters of the *Ilāhiyyāt*, as the following chart shows.

¹⁰ For further information on Avicenna’s dependence on *Metaphysics* Z in chapters V.8-9 of the *Ilāhiyyāt*, see the notes to the translation in *Libro della Guarigione, Le Cose Divine* di Avicenna (Ibn Sīnā), a cura di A. BERTOLACCI, UTET (Unione Tipografico-Editrice Torinese), Turin 2007, pp. 481-496.

Treatise V and Chapter I.4



(b) Second, the respective position of chapters V.7 and V.8 is troublesome. Chapter V.8, according to its title, deals with definition in general. Nonetheless it follows, rather than preceding, chapter V.7, whose topic is a particular aspect of definition, namely the relationship of the definition with the thing defined. On the basis of its title, therefore, chapter V.8 would be more suitable than chapter V.7 to initiate the treatment of definition within treatise V. (c) Third, the initial sentence of chapter V.8 (« What we must now make known is the manner in which *things are defined, the relation of definition to them*, and the difference between a thing's quiddity and form », emphasis added) resumes expressly the topic mentioned in the title of chapter V.7, and stresses the continuity of the two chapters, rather than their distinctness, making their separation problematic.

With regard to these problems a further observation is in order: two of the 'anomalous' chapters of the *Versio Vulgata* recalled before, namely the extremely succinct chapter V.5, and the chapter V.8 that stands in close continuity with the preceding textual unit, bear very short titles ('Chapter on species', 'Chapter on definition', respectively) in comparison with the more comprehensive and articulated titles of the other chapters of treatise V. These latter invariably integrate the mention of their main topics (like universals, genus, differentia) with supplementary notations, according to a tendency whose climax is reached in chapter V.2. Brevity in titles of chapters is not totally unusual in the *Ilāhiyyāt*¹¹, but represents, both in treatise V and in the *Ilāhiyyāt tout court*, the exception to the rule¹².

¹¹ See, for example, the equally short title of chapter IX.7 'Chapter on the [celestial] destination [of human souls after death]', *faṣl fī l-ma'ād*.

¹² In some manuscripts, chapter V.8 bears a longer title ('Chapter on definition and its parts') that echoes the title of chapter V.9: this might reinforce the impression of an uncertain and problematic status of the title of chapter V.8.

It can be hardly coincidental that exactly the three chapters (V.5; V.7; V.8) that present the structural difficulties just recalled figure in the *Versio Latina* in a radically different way with respect to the *Versio Vulgata*, thus producing an overall layout of treatise V that is largely peculiar in terms of articulation and disposition of chapters.

II. THE *VERSIO LATINA*

II.1 *The Latin Translation*

The *Versio Latina* finds in the Latin medieval translation its most accomplished representative, although it is witnessed also by Arabic testimonia (see below, section II.2). Taking the Latin translation as model, we get the following picture of treatise V:

Treatise V in the *Versio Latina* (according to the Latin translation)

I Capitulum de rebus communibus et quomodo est esse earum [= V.1 in the *Versio Vulgata*]

II Capitulum qualiter naturas comitatur universalitas et completur dictio in hoc et deinde de differentia universalis et particularis ad totum et partem [= V.2]

III Capitulum de assignanda differentia inter genus et materiam [= V.3]

IV Capitulum de intellectibus qui sunt extra intentionem generis quomodo recipiuntur intra naturam generis [= V.4 + V.5]

V Capitulum de assignanda comparatione definitionis et definiti [= V.7 + V.8]

VI Capitulum de differentia et eius certitudine [= V.6]

VII Capitulum de comparatione definitionis cum partibus suis [= V.9]

The first three chapters of the Latin translation (I-III) faithfully reflect chapters V.1-3 of the *Versio Vulgata*. The fourth chapter (IV), on the other hand, is the result of the conflation of chapters V.4 and V.5. Two other consecutive chapters (V.7 and V.8) are not only conflated in a single chapter but also placed as the fifth unit (V) of the treatise, i.e. they are moved before the chapter that precedes them in the Cairo edition (V.6), which becomes the sixth chapter (VI) of the treatise. The seventh, last, chapter (VII) of the Latin translation corresponds to chapter V.9 in the *Versio Vulgata*. The variations with respect to the *Versio Vulgata* are hence of three types: to start with, a first pair of consecutive chapters (V.4, V.5) is conflated; second, a further pair of consecutive chapters (V.7, V.8) is conflated; finally, the second pair of consecutive chapters is transposed before the chapter that precedes them in the *Versio Vulgata* (chapters V.7-8 are placed before chapter V.6). In this way, the Latin translation presents treatise V in its entirety as consisting of only seven chapters.

By means of this arrangement of chapters, the Latin translation provides a sufficiently coherent outlook of treatise V. After the two introductory chapters

on universals in general, the reader finds two chapters dealing with the genus, one chapter devoted to the species/definition, one chapter taking into account the differentia, and one chapter facing the relationship between the definition and its parts (one of which is, of course, the differentia). In this way, the three structural problems that the Versio Vulgata presents — namely (a) the succinctness of chapter V.5; (b) the structural priority of a chapter (V.7) dealing with a particular aspect of definition with respect to a chapter (V.8) dealing with definition in general; and (c) the unnatural severing of chapter V.8 from chapter V.7 on account of the affinity of their content — do not subsist anymore: (a) the annexation of chapter V.5 to chapter V.4 considerably extends chapter V.5 *ex parte ante*; (b) in so far as chapter V.8 is the continuation of chapter V.7, it does not bear any title and the impression — conveyed by its title — of a *hysteron proteron* of its topic with respect to the topic of the preceding chapter vanishes; (c) being merged with chapter V.7, chapter V.8 is perfectly allowed to show thematic similarities with the preceding chapter. Moreover, not being independent units and not bearing therefore any title, chapters V.5 and V.8 are saved from the troublesome excessive shortness of their titles with respect to Avicenna's normal usage.

The rearrangement of the chapters of treatise V that occurs in the Latin translation is too complex to be coincidental. It is hard to believe that the two confluences and the transposition are produced by bare mechanical accidents of the process of copy, which would recur and concentrate in Treatise V, be it on the Arabic or the Latin side of the textual transmission: the elaborated character of the outlook of Treatise in the Latin translation with respect to the Versio Vulgata excludes its accidental nature. On the other hand, it is equally hard to believe that the Latin translator(s) used an Arabic manuscript (or a sample of Arabic codices) in which the series of chapters of treatise V was as it is in the Versio Vulgata, but decided on his (their) own to give a new arrangement to the structure of the treatise. A similar case never happens again in the *Philosophia prima* (in which the last two chapters are abbreviated, as we have seen, but maintained in their original order one after the other), and one wonders why it should occur only in Treatise V if it depended on a deliberate action of the Latin translator(s).

That the Versio Latina is neither an accidental result of the process of copy, nor the effect of the Latin translator's creativity, is confirmed by the evidence provided by Arabic manuscripts.

II.2 *The Arabic Evidence*

Besides the Latin translation, a significant sample of the Arabic manuscripts of the *Ilāhiyyāt* presently known bears traces, in various extents and amounts, of the Versio Latina. In the wider framework of the manuscripts of the work known to date, about two-hundred and thirty codices contain a portion of Treatise V

sufficient to evaluate the presence, or lack thereof, of the Versio Latina¹³. The majority of these manuscripts witness the Versio Vulgata of this treatise, as I have already pointed out; others, however, document relevant differences with respect to the Versio Vulgata, which are tantamount to similarities with respect to the Versio Latina, in an ascending line of structural variation that brings some manuscripts to be structurally very similar to the Latin translation and, therefore, suitable to be considered testimonia of the Versio Latina. Pieces of evidence of the Versio Latina are spread in more than fifteen manuscripts, so as to make the amount of evidence in question, though small with respect to the overall number of witnesses of the Versio Vulgata, considerable in itself.

The following types of data are discussed in the present section. 1) Some manuscripts of the *Ilāhiyyāt* report, in marginalia or in preliminary indices, lists of chapters of treatise V squarely identical to the Versio Latina. 2) Some manuscripts show evident similarities between the actual content of treatise V and the Versio Latina. 3) Some aspects of the Versio Latina appear to govern also the way in which treatise V was quoted by early and authoritative followers of Avicenna. Testimonia of type 1) and 2) are not always distinct, although not all witnesses of type 1) are also witnesses of type 2) and vice-versa.

II.2.1 Lists of Chapters

The first type of evidence considered here puts us in front of a very precise correspondence: some manuscripts report lists of chapters of treatise V in which exactly the same seven chapters that we find in the Latin Translation are mentioned, according to the same order, by means of their respective titles. This happens not only in marginal glosses written in correspondence of the beginning of treatise V — as in the case of ms. Berlin, Deutsche Staatsbibliothek, Minutoli 229, copied in 1083H/1672-3 in Işfahān and already considered in the aforementioned article — but also into the main text of manuscripts immediately before treatise V, i.e. as a transition between the end of treatise IV and the beginning of treatise V¹⁴.

¹³ See www.avicennaproject.eu, section ‘Manuscripts/List (per nations)’, as of July 2017. An overview of the manuscripts of the *Ilāhiyyāt* of Avicenna’s *Šifā’* (with a special focus on the codices preserved in Turkey) is provided in A. BERTOLACCI, *Avicenna’s Kitāb al-Šifā’ (Book of the Cure/Healing): The Manuscripts Preserved in Turkey and Their Significance*, in *The Reception of the Classical Arabic Philosophy in the Ottoman Empire*. Proceedings of the Workshop of the International Associated Laboratory ‘Philosophie dans l’aire ottomane’, Istanbul, 2-4 November 2015, ed. J. JABBOUR, *Mélanges de l’Université Saint Joseph*, 67, 2017, forthcoming.

¹⁴ In the first case, the lists are often written by hands that are different from the main hands of the manuscripts, whereas in the second case the hands of the lists and the hands of the

The following table compares the roster of chapters of treatise V in the Latin translation with (a) an example of marginal gloss appended to treatise V, similar to the one found in the Berlin manuscript, and (b) an instance of a preliminary account of the contents of treatise V in seven chapters, placed between treatise IV and treatise V. The most ancient manuscripts known so far that bear evidence of (a) and (b) have been chosen as witnesses. If one observes the three cases synoptically, the correspondence is evident and striking.

Latin Translation	(a) Marginal List of Chapters at the beginning of treatise V in Ms. Ankara, Üniversitesi İlahiyyat Fakültesi Kütüphanesi 36910-11 (1077H/1666-7), fol. 134r ^a	(b) List of Chapters between the end of treatise IV and the beginning of treatise V in Ms. Kolkata, Asiatic Society of Bengal Library, Ar. 102 (469H/1076-7; the date of copy probably refers not to this ms., apparently copied in XI/XVII c., but to its exemplar), fol. 1144r [686r] ^b
I Capitulum de rebus communibus et quomodo est esse earum [= V.1]	[1] (ل) On common things and how their existence is	[1] The first [chapter]: Chapter on common things and how their existence is
II Capitulum qualiter naturas comitatur universalitas et completur dictio in hoc et deinde de differentia universalis et particularis ad totum et partem [= V.2]	[2] (ب) On the modality according to which universality pertains to universal natures (completion of the discussion of this [topic]) and on the difference between whole and part, universal and particular	[2] The second [chapter]: On the modality according to which universality pertains to universal natures (completion of the discussion of this [topic]) and on the difference between whole and part, universal and particular
III Capitulum de assignanda differentia inter genus et materiam [= V.3]	[3] (ج) On the distinction between genus and matter	[3] The third [chapter]: On the distinction between genus and matter

manuscripts are usually identical. In the second case, the lists of chapters of treatise V are usually preceded and followed by analogous lists of chapters of the other treatises of the work at the beginning of these latter. A third case of preliminary overviews of the contents of treatise V is given by the tables (rather than lists) of chapters that one finds in some manuscripts: these tables, however, do not provide significant evidence for the issue at stake, since they often report treatise V according to the *Versio Vulgata*, with some occasional variations.

IV Capitulum de intellectibus qui sunt extra intentionem generis quomodo recipiuntur intra naturam generis [= V.4 + V.5]	[4] (ز) On the fact that the notions external to the genus supervene upon the genus' nature	[4] The fourth [chapter]: On the fact that the notions external to the genus supervene upon the genus' nature
V Capitulum de assignanda comparatione definitionis et definiti [= V.7 + V.8]	[5] (ه) On determining the relationship between the definition and the thing defined	[5] The fifth [chapter]: On determining the relationship between the definition and the thing defined
VI Capitulum de differentia et eius certitudine [= V.6]	[6] (ج) On the differentia and its ascertainment	[6] The sixth [chapter]: On the differentia and its ascertainment
VII Capitulum de comparatione definitionis cum partibus suis [= V.9]	[7] (ي) On the relationship between the definition and its parts	[7] The seventh [chapter]: On the relationship between the definition and its parts

^a The similar marginal gloss in Ms. Berlin, Minutoli 223 (1083H/1672-3), fol. 67r, reports incompletely the titles of the chapters numbered as first ('Chapter on common things') and as fifth ('Chapter on determining the definition and the thing defined'), and inserts a mistake in the title of the chapter numbered as second ('On the modality according to which quantity [*kammiyya*, instead of: universality, *kulliyya*] pertains to universal natures etc.'): see BERTOLACCI, *How Many Recensions* cit., p. 289 (where the mistake in the title of the fifth chapter is overlooked). Both the ms. Berlin and the ms. Ankara at the beginning of treatise V originally report this treatise as consisting of eight chapters ('The fifth treatise in which eight chapters [are]', ms. Berlin; 'The fifth treatise [of] eight chapters', ms. Ankara), a numerical indication corrected into 'seven' after the insertion of the marginal gloss at stake.

^b Cf. the similar list in Ms. Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī, 7347 (before 630H/1232-3), fol. 118r, and Ms. Paris, BNF Ar. 6829 (Dū l-ḥiḡḡa 1054H/January-February 1645), fol. 431r: in both cases, the term 'chapter' after the ordinal number at the beginning (omitted by ms. Kolkata) is always explicitly given.

The relevance of these lists of chapters of treatise V that agree with the Latin translation should not be underestimated, since they might be somehow related to the overall conspectus of topics which, according to his biography, Avicenna used to compose most of the *Šifā'*¹⁵.

¹⁵ «The Master wrote down the main topics (*ru'ūs al-masā'il*) in approximately twenty quires of one-eighth [octavo?] size, continuing on it for two days, until he had written down the main topics without the presence of a book or source to consult, but entirely from his memory and by heart. Then he placed these quires before him, took a sheet of paper, examined each problem and wrote a

This first type of evidence is somehow corroborated by a related, though much weaker, kind of evidence. Manuscripts sometimes indicate that treatise V is made of seven chapters, as in the Versio Latina, rather than nine, as in the Versio Vulgata; this indication can be found either at the beginning of the *Šifā'*, or at the beginning of the *Ilāhiyyāt*, or at the beginning of treatise V itself, by means of the sole numeral 'seven' (written in letters), without any list of titles¹⁶. This evidence, however, is feeble: first of all, number 7 and number 9 can be easily confused in the process of copy because of their graphic similarity when they are written without dots ('seven', سبعة, *sab'a*; 'nine', تسعة, *tis'a*); moreover, the number seven, taken by itself, indicates the lack of any two chapters whatsoever of treatise V according to the Versio Vulgata, not necessarily of the two chapters that are absent in the Versio Latina¹⁷.

II.2.2 Actual Content of Manuscripts

Passing now from external elements, like the lists or counts of chapters seen in the previous section, to more internal features, namely the actual content of

commentary on it. He would write fifty pages every day, until he had finished all of the "Physics" and "Metaphysics", with the exception of the book on Animals and Plants. He then began on the "Logic" and wrote one section of it » (*The Life of Ibn Sina. A Critical edition and Annotated Translation* by W. E. GOHLMAN, State University of New York Press, Albany, New York 1974, p. 59, modified; for the inclusion of botany, besides zoology, among the parts of the natural philosophy not written by Avicenna in this phase, see *ibid.*, the critical apparatus of the Arabic text). The precise extent of the conspectus of topics of the *Šifā'* that Avicenna wrote is uncertain: it cannot be excluded that it was all-inclusive, encompassing not only the parts of the work written immediately after it according to this passage — namely the main bulk of natural Philosophy (with the exception of zoology and botany), metaphysics, and probably the first section of logic — but also those written before and afterwards.

¹⁶ See, for example, Ms. Istanbul, Süleymaniye Kütüphanesi, Damat Ibrahim Paşa 823 (697H/1297-8), where the number 'seven' applied to the chapters of treatise V occurs at the beginning of the *Šifā'*.

¹⁷ A sequential numeration of the chapters of treatise V that mirrors the Versio Latina rather than the Versio Vulgata is occasionally found in the margins of manuscripts in correspondence with the chapters of this treatise relevant for the Versio Latina: this happens, for instance, in the already mentioned Ms. Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī, 7347, in which a marginal numeration by means of ordinal numbers (written in letters) is added by a different hand to chapters V.1-4, 6-7, and 9, to the exclusion of chapter V.5 (which the manuscript nonetheless contains as independent unit; see point d) of the present section). But since this manuscript contains a list of seven chapters in accordance with the Versio Latina at the beginning of treatise V (see above, p. 492, n. b), the marginal numeration of chapters of treatise V that reflects the Versio Latina might derive from this list, rather than being an additional piece of evidence. Marginal numerations in eight chapters, rather than seven, are also found: see, for instance, Ms. Cairo, Dār al-Kutub al-Miṣriyya, 826 *ḥikma wa-falsafa* (15 Šawwāl 1084H/23 January 1674), in which the marginal *abjad* numeration of chapters, provided by a different hand, does not take into account Chapter V.5. At the beginning of treatise V (fol. 62r), the main hand of this manuscript reports in the left margin that this treatise consists of eight chapters (« and in it eight chapters [are] »).

treatise V, we find a further type of evidence: some Arabic manuscripts present a layout of treatise V similar to the one displayed in the Versio Latina. In this case, however, the correspondence between the Latin Translation, on the one hand, and the Arabic manuscripts, on the other, is not exact. We rather observe that the distinct features of the Versio Latina tend to spread in distinct manuscripts, or group of manuscripts, as the result of a sort of structural ‘diffraction’. However, at the same time, these same features tend also to concentrate in other manuscripts, according to a trend that brings some manuscripts to instantiate almost integrally the Versio Latina, without, however, being its precise duplicate.

More specifically, we are in front of the following fourfold scenario. (a) In some manuscripts, chapters V.7 and V.8 are merged, as in the Versio Latina, without however being placed before Chapter V.6¹⁸

(b) Conversely, in other manuscripts chapters V.7 and V.8 are placed before chapter V.6, as in the Versio Latina, without however being merged. In this way, these manuscripts display the same sequence of chapters of the Versio Vulgata that the Versio Latina reproduces, but all the nine chapters of the Versio Vulgata, although arranged as in the Versio Latina, remain discrete units, with no merging of a chapter with another¹⁹.

(c) Some manuscripts both transpose chapters in accordance with the Versio Latina and merge some of them. Thus, in at least one manuscript chapters V.7 and V.8 are merged and placed before chapter V.6, whereas chapters V.4 and V.5 remain distinct. This happens in Ms. Mashhad, Kitābhānah-i Āstān-i Quds-i Razavī, 7347, which is one of the most ancient witnesses of the *Ilāhiyyāt*, having been copied before 630H/1232-3²⁰.

(d) We come finally to the most important piece of evidence at our disposal: in at least one manuscript, the sequence of all chapters is as in the Versio Latina, chapters V.7 and V.8 are merged and placed before Chapter V.6, and chapters

¹⁸ Ms. Leiden, Universiteitsbibliotheek, Or. 4 (Goliuss Collection) (Catalogue CCO, nr. 1444) (before X/XVI c.) displays no transition from chapter V.7 to chapter V.8 in the main text; the title of chapter V.8 is added in the margin by a different hand. In Ms. Oxford, Bodleian Library, Pococke 125 (Uri's catalogue I, 435) (Ġumādā I 561H/March-April 1166 or 571H/November-December 1175), the descriptive part of the title of chapter V, 8 ('... on the definition') is absent, and only the term *faṣl* ('Chapter') appears.

¹⁹ See Mss. Aligarh, Maulana Azad Library, Aligarh Muslim University, Subhān Allāh 110/53 'A; Aligarh, Maulana Azad Library, Aligarh Muslim University, University 'Ulūm 3 'A (before 1273H/1856-7); Rampur, Rampur Raza Library, 3483 ع (1293H/1876-7); Tehran, Kitābhānah-i Maḡlis-i Shūrā-yi Millī (now: Kitābhānah-i Maḡlis-i Shūrā-yi Islāmī = Parliament Library), 1898 (Thursday 16 Rabī' II 995H/26 March 1587). In Ms. Tehran, Kitābhānah-i Millī Ġumhūrī-yi Islāmī-yi Iran (= National Library), 3843 (Ṣafar 1295H/February-March 1878), the same sequence of chapters is awkwardly brought in agreement with the list of seven chapters of the Versio Latina of treatise V that one finds at the beginning of treatise V.

²⁰ On the list of chapters of treatise V corresponding to the Versio Latina that this manuscript presents at the beginning of treatise V, see above, pag. 492, n. b.

V.4 and V.5 are partially merged. The climax of this tendency of concentration of the features of the Versio Latina in an Arabic codex is reached by Ms. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran (= National Library), 1327 (X/XVI c.)²¹, which presents a layout of treatise V almost identical to the Versio Latina, namely a fifth chapter corresponding jointly to chapters V.7 and V.8 of the Versio Vulgata, and a seventh chapter corresponding to chapter V.9 of the Versio Vulgata. The only difference between the Ms. Tehran and the Versio Latina is that, after the fourth chapter corresponding to chapter V.4 of the Versio Vulgata, the Ms. Tehran places another chapter, without number: this further chapter has the same title and content of chapter V.5 of the Versio Vulgata, but is not numbered (the following chapter in the manuscript is in fact expressly reckoned as fifth chapter).

Treatise V in Ms. Tehran, Kitābhānah-i Millī Ğumhūri-yi Islami-yi Iran (= National Library), 1327 (X/XVI c.)

Chapters	1	2	3	4	--- *	5	6	7
Versio Latina	V.1	V.2	V.3	V.4		V.5		V.7
Versio Vulgata				V.4	V.5*	V.7	V.8	V.9

--- = without number

* = chapters bearing the same title ('On the species', *fi l-naw'*)

Ms. Tehran, Millī 1327 is the most precise Arabic counterpart of the Latin translation of treatise V presently known.

II.2.3 Quotations

The indirect tradition also offers some important clues on the present subject, thanks to authors who lived shortly after Avicenna and whose intellectual pedigree was linked with him. Whereas the debates on metaphysical topics performed within Avicenna's school and recorded in the *Mubāḥaṭāt* (*Discussions*) or in the *Ta'liqāt* (*Annotations*) do not provide relevant data²², much more

²¹ This manuscript constitutes the second part of the codex named 'Millī 580' by Y. Mahdavi in his description of the content of the *Šifā'* in Y. MAHDAVĪ, *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā*, Intiṣārāt-i Dāniṣgāh-yi Tihirān, Tehran 1333HŠ/1954, pp. 150-169.

²² The *Mubāḥaṭāt* contain a synopsis (*talḥiṣ*) of the *Ilāhiyyāt*, ascribed to Bahmanyār, which however does not contain passages from treatise V (see D. C. REISMAN, *The Making of the Avicennan Tradition: The Transmission, Contents, and Structure of Ibn Sīnā's al-Mubāḥaṭāt* (The Discussions), Brill,

interesting is the case of the quotations of the *Ilāhiyyāt* by a second-generation student of Avicenna, Abū l-‘Abbās Faḍl Ibn Muḥammad al-Lawkarī — who lived between the V-VI/XI-XII centuries, and was a student of Bahmanyār Ibn al-Marzubān (d. 458H/1066) — in his main philosophical work *Bayān al-Ḥaqq bi-ḍamān al-ṣidq* (*Clarification of the Truth with the Guarantee of the Veracity*)²³. The metaphysical section of Lawkarī’s *Bayān*, as the rest of the work, is modeled upon the large *summa* of Avicennian philosophy written by Lawkarī’s master Bahmanyār (the *Kitāb al-Taḥṣīl*, or *Kitāb al-Taḥṣīlāt*, *Book of the Validated Knowledge*, or *The Digest*), but it also contains references to the *Ilāhiyyāt* that are independent from Bahmanyār’s work.

In Lawkarī’s *Bayān*, eight chapters correspond to treatise V of the *Ilāhiyyāt* (chapters 25 to 32 of the metaphysical section). In the first four of them, Lawkarī depends mainly (although not exclusively) on Bahmanyār’s citations of treatise V of the *Ilāhiyyāt* in chapters IV.2-5 of the second book of the *Taḥṣīl* (ii.IV.2-5), whereas in the remaining four chapters he does not rely anymore on Bahmanyār (whose quotations of treatise V of the *Ilāhiyyāt* in the *Taḥṣīl* stop at ii.IV.5) and draws from this treatise independently from Bahmanyār. The following table gives a more precise idea of Lawkarī’s compositional strategy (the *loci* of treatise V that Lawkarī quotes directly are reported in bold).

AL-LAWKARĪ, *Bayān al-Ḥaqq bi-ḍamān al-ṣidq. Al-Qism al-ilāhī*, ed. I. DIBĀĠĪ, Tehran 1995, pp. 154-206

Chapters	25	26	27	28	29	30	31	32
Quotations of Bahmanyār, <i>Taḥṣīl</i>	ii.IV.2	ii.IV.3	ii.IV.4	ii.IV.5	---	---	---	---
Quotations of Avicenna, <i>Ilāhiyyāt</i> V	V.1, V.2 (through Bahmanyār) V.1, V.2	V.2 (through Bahmanyār)	V.3, V.4 (through Bahmanyār)	V.7 (through Bahmanyār)	V.5	V.8	V.6	V.9

Leiden 2002, p. 43, and Appendix F, I.B.c.2, p. 293; II, p. 300). Among the references to the *Ilāhiyyāt* in the *Ta’līqāt* analyzed by J. JANSSENS, *Ibn Sīnā’s Ta’līqāt: The Presence of Paraphrases of and Super-Commentaries on the Ilāhiyyāt of the Šifā’*, in F. OPWIS, D. C. REISMAN eds., *Islamic Philosophy, Science, and Religion: Studies in Honor of Dimitri Gutas*, Brill, Leiden - Boston 2012, pp. 201-222, only one regards chapter V.2 (see *ibid.*, p. 213), whereas two others deal with the issue of specific difference (*ibid.*, p. 203, n. 9; p. 209) but are not regarded by Janssens as referring to treatise V.

²³ R. MARCOTTE, *Preliminary Notes on the Life and Works of Abū al-‘Abbās al-Lawkarī* (d. ca. 517/1123), « *Anaquel de Estudios Árabes* », 17, 2006, pp. 133-157; J. JANSSENS, *Al-Lawkarī’s Reception of Ibn Sīnā’s Ilāhiyyāt*, in D. N. HASSE, A. BERTOLACCI eds., *The Arabic, Hebrew and Latin Reception of Avicenna’s Metaphysics*, De Gruyter, Berlin 2012, pp. 7-26.

For the present purposes, it is interesting to observe that already in the first chapter (25) of the *Bayān*, Lawkarī does not simply quote Bahmanyār's succinct account of chapters V.1 and V.2 of the *Ilāhiyyāt*, but he also quotes further passages of the same chapters independently from Bahmanyār. This means that Lawkarī had an access (arguably direct) to the text of the *Ilāhiyyāt*, and in particular of treatise V, different from the indirect access to it provided by Bahmanyār. More importantly, when, in the last four chapters (29-32) of the *Bayān*, Lawkarī stops citing Bahmanyār and quotes directly from treatise V of the *Ilāhiyyāt*, he quotes, in the order, chapters V.5, V.8, V.6, and V.9. A main similarity with the *Versio Latina* is evident: also in Lawkarī, chapter V.8 of the *Ilāhiyyāt* precedes chapter V.6. As in the *Versio Vulgata*, chapter V.5 and chapter V.8 are independent from, respectively, chapter V.4 and chapter V.7, since each of them corresponds to an independent structural unit in Lawkarī's work (chapters 29 and 30, respectively) and bears its own title. It is likely that Lawkarī did not quote at all chapter V.7 of the *Versio Vulgata* in this context, since chapter V.7 is a chapter cited by Bahmanyār in chapter ii.IV.5 of the *Tahṣīl*, already quoted by Lawkarī in chapter 28. It remains therefore uncertain which place chapter V.7 had in Lawkarī's copy of the *Ilāhiyyāt*: we can speculate that the version of the *Ilāhiyyāt* known to Lawkarī presented chapter V.7 immediately before chapter V.8, and that therefore the sequence of chapters of treatise V available to Lawkarī was V.1-4, V.5, V.7, V.8, V.6, V.9, as in the *Versio Latina*, but in discrete form, as in the witnesses of type (b) taken into account in the previous section.

II.3 *Provisional Results*

The evidential basis corroborating the existence of an Arabic counterpart of the *Versio Latina* is now considerably larger than before. The *Versio Latina* is, in fact, witnessed not only by the *Philosophia Prima*, but also by Arabic manuscripts not consulted, or insufficiently inspected, in the current Arabic edition. More specifically, whereas only one piece of evidence from the Arabic side was known so far, namely the list of chapters that is reported in the Berlin manuscript mentioned above, the data now available embrace not only further instances of the same type of evidence (similar lists of chapters of treatise V in other manuscripts), but also the actual content of this treatise in some codices, and the citations of treatise V by subsequent authors.

This allows to draw some provisional conclusions. First, the existence of several Arabic witnesses of the *Versio Latina* confirms that this latter is not an intentional modification of treatise V introduced arbitrarily into the translation by the Latin translator himself, who for some reasons decided to convey a version of treatise V different from the *Versio Vulgata* that he could read in his Arabic model; this modification rather lies outside the scope of the translator's possible

interventions and depends on the Arabic exemplar of the Latin translation. No alternative hypothesis is viable: in particular, it looks unlikely that all the Arabic witnesses of the *Versio Latina* that have been discussed above might bear traces, retroactively, of the arbitrary choice supposedly made by the Latin translator in a different cultural and linguistic context and at the remote Western periphery of the Muslim world, especially because some of the Arabic witnesses in question appear to be coeval, if not older, than the Latin translation itself.

Second, the plurality, both in number and in typology, of the Arabic witnesses of the *Versio Latina* prompts also to exclude that the variation in question, though occurring originally on the Arabic branch of the tradition, was limited to the exemplar of the Latin translation, as if the Arabic model of the Latin translation or its direct or remote ancestor had suffered some peculiar transposition of chapters. We are rather in front of a ‘family’ of witnesses of different provenience and nature — lists of chapters, actual manuscripts, and quotations by subsequent authors — whose precise genealogical relations have still to be ascertained, but whose nature of a real group of independent testimonia cannot be doubted.

Third, some of the Arabic witnesses of the *Versio Latina* date back to a very ancient stage of the period of diffusion of Avicenna’s work, possibly surpassing in ancientness the Latin translation itself (second half of the VI/XII c.): the Kolkata manuscript that transmits the list of seven chapters at the beginning of treatise V, apparently copied in the XI/XVII century, might depend on an ancestor written in 469H/1076-7, a few decades after Avicenna’s death, and, in general, this and similar lists of chapters might derive from very ancient models; the Mashhad manuscript that displays one of the most faithful Arabic instances of the *Versio Latina* (see section II.2.2.c) was copied before 630H/1232-3; and Lawkarī lived between the V-VI/XI-XII centuries. Together with the Latin translation, these further witnesses attest the occurrence of the variation in question, *in toto* or in part, at a very high point of the transmission history of the *Ilāhiyyāt*.

On all these accounts, the possibility that the *Versio Latina* represents a distinct recension of the *Ilāhiyyāt* — witnessed jointly by the Arabic exemplar of the Latin translation and by a group of further Arabic testimonia, and produced in an ancient stage of the dissemination of Avicenna’s work — is corroborated.

III. ISSUES

The data regarding the *Versio latina* that can be assessed with relative certainty lead to a number of issues. For some of them (III.1-3) I have firmer opinions, whereas others (III.4-5) are more uncertain, although some sensible hypothesis about them can be formulated. Only future research will be able to corroborate or disprove the suggestions I am tentatively advancing in this last section of the article.

III.1 *Versio Latina and Versio Vulgata in Chronological Perspective*

The main issue to face is whether the *Versio Vulgata* is more original than the *Versio Latina* in the transmission history of the *Ilāhiyyāt*, or, vice versa, the latter is more original than the former. In other words, the question is whether the *Versio Vulgata*, despite being evidently the most widespread version of treatise V, is also, among the two versions, the most pristine, or rather it is an adjustment, which subsequently gained wider diffusion, of a previous account of it, possibly documented by the *Versio Latina*.

The priority in time of the *Versio Latina* with respect to the *Versio Vulgata* can be argued in three respects. First, the *Versio Vulgata* is a more plain and straightforward (actually, as we will see below, a more ‘scholastic’) account of the doctrine of universals than the *Versio Latina*: in the former, the universals pertaining to the essence (genus, species, differentia) are taken into account one after the other, with a final treatment of the derivative topic of definition; in the latter, more convolutedly, after the initial treatment of the genus, the account of differentia is encapsulated within two chapters dealing with definition. Second, by including two chapters absent in the *Versio Latina* (V.5 and V.8), the *Versio Vulgata* presents an account of universals that is also structurally lengthier than the one found in the *Versio Latina*. Third, the *Versio Vulgata* displays puzzling structural anomalies that, as we have seen, the *Versio Latina* does not have. On all these accounts, the *Versio Vulgata* has greater chances of being a modification of the *Versio Latina* than the other way round. In other words, in so far as it exhibits a less stereotypical, more condensed, and less problematic treatment of universal than the one in the *Versio Vulgata*, the *Versio Latina* of treatise V has good credentials to be more original than this latter.

Also in several other cases the readings of the *Ilāhiyyāt* witnessed by the *Versio Latina* through the Latin translation look more original than the ones attested by the *Versio Vulgata*²⁴.

²⁴ A case in point is a passage of chapter VIII.4 (IBN SĪNĀ, *Al-Šifāʾ*, *al-Ilāhiyyāt* (1) cit., pp. 346.13-15) — present in the *Versio Vulgata*, but absent in the Latin translation and in other ancient witnesses of the *Ilāhiyyāt* — which looks suspicious and appears to be a later interpolation into Avicenna’s original text (see A. BERTOLACCI, *God as pure existence in chapter VIII, 4 of the Metaphysics of Avicenna’s Book of the Cure: the text and the doctrine*, communication held in the conference *Les traditions grecques, arabes et latines des Elements de Théologie et du Livre des causes*, org. M. Dragos Calma, avec les concours d’Olivier Boulnois, Ph. Hoffmann et Marc Geoffroy, Paris, 16 April 2016). The Latin translation supports many of the corrections of the text of the *Ilāhiyyāt* that I have proposed in A. BERTOLACCI, *The Reception of Aristotle’s Metaphysics in Avicenna’s Kitāb al-Šifāʾ: A Milestone of Western Metaphysical Thought*, Brill, Leiden - Boston, 2006, Appendix A.

III.2 Purpose of the Versio Vulgata

Assuming that the previous assessment of the chronological relation of Versio Latina and Versio Vulgata is correct, one can guess why the Versio Vulgata at some point replaced the more original Versio Latina. First, there was apparently the need to guarantee to the treatment of the universal ‘species’ an independent chapter, after the two previous chapters on genus. Second, a unified treatment of definition, as in the Versio Vulgata, rather than a treatment of this notion split into two chapters encapsulating the treatment of specific difference, as in the Versio Latina, might have seemed more coherent and preferable. Finally, the passage that becomes the incipit of chapter V.8 in the Versio Vulgata (« What we must now make known is ... ») might have looked compatible with the beginning of a new chapter.

On all these accounts, the Versio Vulgata is, in structure, a sort of ‘scholastic’ account of the doctrine of universals, in which the essential universals of the tradition (genus, species, differentia) are analyzed one after the other, as Avicenna had already done at the beginning of the *Šifā’* in his reworking of Porphyry’s *Isagoge*, or *Madḥal*²⁵.

<i>Madḥal</i> (Logic of the <i>Šifā’</i>)	<i>Ilāhiyyāt</i> (Versio Vulgata)	<i>Ilāhiyyāt</i> (Versio Latina)
	V.1-2 universals in general	V.1-2 universals in general
I.9 genus	V.3-4 genus	V.3-4 genus
I.10-11 species	V.5 species	V.5 definition
I.13 differentia	V.6 differentia	V.6 differentia
	V.7-9 definition	V.7 definition
I.14 property and common accident		

It is worth noticing that in the *Madḥal* the species is dealt with in two distinct chapters (I.10-11): this extensive treatment of species in logic might have been one of the reasons that prompted early readers of treatise V of the *Ilāhiyyāt* to reserve to this universal a similarly independent, though much briefer, account in metaphysics.

It is also important to remark, in the light of what we are going to see in the following section, that this attempt of bringing back the original sequence of

²⁵ This tendency to interpreting ‘Avicenna by means of Avicenna’ is instantiated by the commentary on the *Ilāhiyyāt* by Mullā Ṣadrā, in which no mention of the Versio Latina is made, and, on the contrary, the content of Treatise V is expressly compared with that of the *Madḥal*, namely with the *ex professo* treatment of universals in the logic of the *Šifā’*.

topics of Avicenna's account of universals in the *Ilāhiyyāt* to the more standard order of exposition of this doctrine adopted by Avicenna himself in the *Madḥal* is contrary to Avicenna's *modus operandi* in several regards. First, Avicenna insists on the independence and superiority of metaphysics with respect to subordinate disciplines like logic, and his idea that metaphysics grounds the hypothesis simply assumed by the inferior sciences does often entail a different treatment in metaphysics of topics already expounded in the subordinate disciplines. On the other hand, the structural alignment of the two accounts of universals given by Avicenna respectively in logic and metaphysics conveys *ipso facto* a substantial reduction of his distance from Porphyry and, more in general, from the ancient philosophical tradition, which is contrary to Avicenna's understanding of his own role in the history of philosophy.

III.3 *Agent(s) of the Versio Vulgata*

If, as it seems, the *Versio Vulgata* presupposes an intentional effort of reformulation of the more original profile of treatise V given by the *Versio Latina*, to whom shall we ascribe it? I would exclude the case of simple scribes or owners of manuscripts, who do not possess the authority required to make such a radical and momentous intervention like the one at stake. Conversely, I would equally exclude that Avicenna himself might have revised the profile of Treatise V as in the *Versio Latina* in order to transform it into the *Versio Vulgata*: the structural variations in questions, if by his pen, would probably have been accompanied by modifications of the content of the chapters involved, whereas no such modification, apart from the usual variants of the manuscript transmission, seem to surface in the relevant chapters of treatise V. I have therefore the impression, excluding Avicenna himself, on the one hand, and later scribes, on the other, that the first disciples of the school of Avicenna might be the most plausible candidates to the role of agents of the change.

The Introduction of Avicenna's letter to the disciple Ibn Zayla documents a situation in which some of Avicenna's students aim at reshaping Avicenna's thought as expressed in the *Šifā'*:

«[Ibn Zayla] said: In our Master's statement at the beginning of the *Šifā'*, I came upon some contradictory and conflicting points that fall outside the consensus [of scholars]. So *it would behoove him to provide a correction of that* and to disclose the picture of it [that he has in mind], *if he can* » (emphasis added)²⁶.

²⁶ Arabic text and English translation in REISMAN, *The Making of the Avicennan Tradition* cit., pp. 284, 199, transl. slightly modified. Text quoted also in BERTOLACCI, *How Many Recensions* cit., p. 277, n. 5.

This passage attests, first of all, that the *Šifā'* was the object of heated discussions during Avicenna's lifetime within his school. But it also shows that the master-disciple relationship within this school was a very peculiar one: the student, like Ibn Zayla in our case, could charge the master of inconsistency, ask him to clarify and revise his thought, and also express concerns about the master's capacity to meet this task. The impatient and resentful, not to say arrogant, reply by Avicenna to the petulance of Ibn Zayla is easy to imagine and does not deserve to be quoted. But we are interested here in the student's attitude, more than in the master's reaction. Ibn Zayla's contention is an explicit request of revision and correction of the master's view about some doctrinal points of the *Šifā'*: it is not hard to suppose that, in front of the master's abrupt denial, Ibn Zayla, or students with his same attitude towards authority, might have felt entitled to proceed themselves to the revision, especially after Avicenna's death. The objective counterpart of the disciples' free attitude towards the master's stances in the *Šifā'* is Avicenna's own understanding of this *summa* as an 'unfinished' and 'in progress' work: in many passages he underscores that the *Šifā'* conveys a provisional sketch of his thought, alluding to the possibility of longer expositions of the topics succinctly dealt with in the work, to forthcoming further research about certain subjects, or even to his own inability to solve specific issues²⁷; the provisional nature of the *Šifā'* is emphatically acknowledged by Avicenna himself in the Prologue, by reference to a long-running process of yearly updates and complements of this work, scheduled to last, Avicenna says, «until the end of my life», and gathered in a sort of a 'companion' of the *Šifā'*, named *Kitāb al-Lāwāḥiq* (*Book of the Appendices*), to which various passages of the work refer²⁸. The precise point of the *Šifā'* in need of revision according to Ibn Zayla in the aforementioned passage is also significant: the expression 'beginning of the *Šifā'*' in the above passage means for sure logic, and, within logic, the reference might

²⁷ See, for example, IBN SĪNĀ, *Al-Šifā'*, *al-Ṭabī'īyyāt*, *al-Ma'ādin wa-l-Ātār al-'ulwiyya*, edd. 'A. MUNTASHIR, S. ZĀYID, 'A. ISMĀ'ĪL, al-Hay'a al-'amma li-ṣu'ūn al-maṭābī' al-amīriyya, Cairo 1965, I.5, p. 23.16-17; IBN SĪNĀ, *Al-Šifā'*, *al-Riyāḍiyyāt*, *Ġawāmi'* 'ilm al-mūsīqā, edd. Z. YŪSUF, A. F. AL-AHWĀNĪ, M. A. AL-ḤAFNĪ, Al-Hay'a al-miṣriyya al-'amma li-l-kitāb, Cairo 1956, V.5, p. 135.5-6; IBN SĪNĀ, *Al-Šifā'*, *al-Ilāhiyyāt* (2) cit., IX.7, p. 429.4-7.

²⁸ At least fourteen references to the *Kitāb al-Lāwāḥiq* can be found in the *Šifā'*, ranging over Logic, Natural Philosophy and Mathematics, some of which are discussed in D. GUTAS, *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works*, Brill, Leiden - New York - København - Köln 1988. Second Revised and Enlarged Edition, Including an Inventory of Avicenna's Authentic Works, Brill, Leiden - Boston 2014, pp. 160-163. The importance of the in-progress nature of the *Šifā'* to explain the tendencies of post-Avicennian Arabic philosophy is recalled by D. GUTAS, *The Heritage of Avicenna: The Golden Age of Arabic Philosophy, 1000-ca. 1350*, in J. JANSSENS, D. DE SMET eds., *Avicenna and His Heritage*, Leuven University Press, Leuven 2002, pp. 81-97 (pp. 86-87).

be either to the *Madḥal* or to the *Maqūlāt* (*Categories*), if not to both. As a matter of fact, in these two sections of the *Šifā'* Avicenna upholds doctrinal «points that fall outside the consensus [of scholars]», with regard to, respectively, Porphyry and Aristotle²⁹. In other words, there is some reason to suppose that Avicenna's doctrine of universals — the topic of *Madḥal* and *Ilāhiyyāt* V — was debated and criticized within his school.

Passing from the potentiality of introducing changes in the *Šifā'*, as in Ibn Zayla, to the actual changes introduced in it, we encounter the important figure of Avicenna's disciple and intimate companion Abū 'Ubayd al-Ġūzġānī (d. around the middle of the XI c.). His functions of 'editor' and 'secretary' of Avicenna's works are particularly relevant in this regard. Al-Ġūzġānī's editorial activity can be classified under three distinct headings. First, he helped Avicenna in the final processing of some of his works (writing of clean copies, by Avicenna's dictation or by transcription of the author's drafts, and reading of clean copies in front of Avicenna), without this activity being acknowledged in the work itself: in this regard al-Ġūzġānī acted as the 'amanuensis' of Avicenna, as he has been aptly called³⁰. Second, he undertook the more entertaining and demanding activity of completing, in cooperation with Avicenna, the works left unfinished by the master, signaling this time his own contribution in the final product: this applies in particular to the mathematics of Avicenna's *Book of Salvation* (*Kitāb al-Nağāt*), which al-Ġūzġānī assembled from scattered previous works of Avicenna and wrapped up, writing an Introduction to it³¹, and to the biography of Avicenna, with which he completed the master's autobiography by narrating events of Avicenna's life after their encounter until the master's death³². In this regard, al-Ġūzġānī can be envisaged as a sort of 'ghost-writer' of Avicenna. Most importantly for the present purposes, in a third type of editorial activity al-Ġūzġānī appears to have implemented Avicenna's intentions far beyond this latter's plans, thus resembling more a 'co-author' with his own personal agenda than a mere executor of the master's directives; as it should be expected,

²⁹ See S. DI VINCENZO, *Avicenna against Porphyry's Definition of Differentia Specifica*, «Documenti e studi sulla tradizione filosofica medievale», 26, 2015, pp. 129-184; EAD., *Avicenna's reworking of Porphyry's 'common accident' in the light of Aristotle's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 163-194; N. CAMINADA, *A quotation of an anonymous 'logician' in Avicenna's Categories*, «Documenti e studi sulla tradizione filosofica medievale», 27, 2016, pp. 195-237.

³⁰ T. STREET, *Introduction*, in *Avicenna's Deliverance: Logic, Translation and Notes* by A. Q. AHMED, Oxford University Press, Oxford, 2011, p. XXII; GUTAS, *Avicenna and the Aristotelian Tradition* cit., p. 29.

³¹ See GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 115-117.

³² See D. GUTAS, *Avicenna. Biography*, in *Encyclopaedia Iranica*, ed. E. YARSHATER, vol. III, Routledge and Kegan Paul, London - Boston 1987, pp. 67a-70b.

also in this case his action is recorded in the final product. A case in point is the mathematics of the Persian *Book of Science* for 'Alā' al-Dawla (*Dānešnāme-ye 'Alā'ī*), which consists in al-Ġūzġānī's Persian translation, preceded by his own introduction, of the mathematics that he previously compiled and assembled for the *Nağāt*; this latter however is much more extensive than the mathematics originally planned by Avicenna for the *Dānešnāme-ye 'Alā'ī*, in so far as it contains, besides astronomy and music, also geometry and arithmetic³³. Likewise, the Introduction to the *Šifā'* that al-Ġūzġānī wrote and which is transmitted in manuscripts under his name at the very beginning of the work, looks like a sort of 'critical review' of the *Šifā'* and a palinode of the following Preface by Avicenna³⁴. In a similar vein one can envisage also al-Ġūzġānī's insertion of chapters 2-9 of Avicenna's medical treatise *Maqāla fī l-Adwiya al-qalbiyya* (*On Cardiac Remedies, De medicinis cordialibus* in Latin) in the psychological part of the *Šifā'*³⁵. The analysis of the chronological setting of this third type of interventions — whether they took place in the last leg of Avicenna's life or after his death — lies beyond the scope of the present article³⁶. Worth of notice here is that al-Ġūzġānī applied repeatedly this kind of more original and intrusive editorial activity to the *Šifā'*, of which he felt the commissioner and patron³⁷. Finally, in the complementary capacity of secretary of Avicenna, al-Ġūzġānī was deputed to take care of the final copies of the master's works and to organize their dissemination, having therefore the concrete possibility of introducing changes in them at any time.

³³ See GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 118-119.

³⁴ See the English translation of the Introduction, *ibid.*, pp. 29-34.

³⁵ On the insertion of this part of the *Maqāla fī l-Adwiya al-qalbiyya* within the *Šifā'*, and for an attentive evaluation of whether this insertion should be placed at the same level of editorial activity from which al-Ġūzġānī's Introduction stems, or should be explained differently, see the article by T. Alpina in the present volume.

³⁶ In the introduction to the mathematical section of the *Dānešnāme*, al-Ġūzġānī says that he added this section since the corresponding part written by Avicenna himself had gone lost: this sequence of events (loss; replacement) would imply a certain temporal span, but is regarded as unlikely by GUTAS, *Avicenna and the Aristotelian Tradition* cit., p. 119, for the apologetic tone of al-Ġūzġānī's report. According to Gutas (*ibid.*, p. 112) al-Ġūzġānī's Introduction antedates Avicenna's Prologue to the work, as well as Avicenna's introduction to the later summa *Easterners* (*Mašriqiyyūn*).

³⁷ Al-Ġūzġānī emphasizes in the Introduction to the *Šifā'* and in the biography of Avicenna that he promoted the composition and solicited the completion of the work (GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 31-32; *The Life of Ibn Sina* cit., pp. 55-67). Significantly, the title *Šifā'* for this *summa* occurs in al-Ġūzġānī's Introduction to the *Šifā'*, as well as in his biography of Avicenna, whereas it is absent in Avicenna's Prologue. In his biography of Avicenna, al-Ġūzġānī's underscores that he read the *Šifā'* in front of the master and at the presence of other members of his circle in the famous evening sessions of the school, whereas the *Canon of Medicine* was read concomitantly by other companions (see *The Life of Ibn Sina* cit., p. 55), thus indicating his special connection with, and his role of 'amanuensis' of this work.

Was then al-Ġūzġānī the agent of the Versio Vulgata? The available evidence is not conclusive. On the one hand, judging from the works ascribed to him, extant or attested, and from biographical information, his scientific interests appear to range over zoology, medicine, astronomy, and mathematics in general, rather than logic and metaphysics³⁸. On the other hand, however, his main avowed concerns in the Introduction to the *Šifā* ' is the 'course' followed by Avicenna in this work, the traditional 'order' of topics in the four disciplines it contains, and the 'organization' of its various parts³⁹. Moreover, the agency of Avicenna's official secretary would aptly explain why the Versio Vulgata, being part of the public version of the *Šifā* ' licensed at some point by al-Ġūzġānī in the capacity of Avicenna's editor, had much wider diffusion than the Versio Latina. Given that the main purpose of al-Ġūzġānī's Introduction to the *Šifā* ' is «to defend Avicenna's Peripatetic orthodoxy»⁴⁰, one might also wonder whether the transformation of the Versio Latina of treatise V into its Versio Vulgata does correspond to a similar, though more localized, 'apologetic' attitude, with an analogous aim of effacing some of the innovations introduced by Avicenna within the doctrine of universals in metaphysics and his liberty towards the transmitted ways of exposition, and of bringing him back, at least in the structure of exposition, under the aegis of the previous tradition and its conventions⁴¹.

³⁸ See A. DHANANI, *Jūzjānī: Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad al-Jūzjānī*, in T. HOCKEY ET AL., *The Biographical Encyclopedia of Astronomers*, Springer Reference, Springer, New York 2007, pp. 604-605.

³⁹ See GUTAS, *Avicenna and the Aristotelian Tradition* cit., pp. 33-34.

⁴⁰ *Ibid.*, p. 112.

⁴¹ The issue is whether al-Ġūzġānī's defense of Avicenna's Peripatetic affiliation in the Introduction to the *Šifā* ' is really joined with a 'laudatory dimension', as D. Gutas argues (GUTAS, *Avicenna and the Aristotelian Tradition* cit., p. 112). In this regard, one might wonder whether al-Ġūzġānī's insistence on the «disparity between his organization of the Logic and that of the Physics and Metaphysics» (emphasis added), and his intention to arouse «wonder for his ability to compose the Physics and the Metaphysics in a period of twenty days without having access to books but by taking dictation only from his heart which was preoccupied with the afflictions [then] besetting it» (emphasis added; Engl. transl. in GUTAS, *Avicenna and the Aristotelian Tradition* cit., p. 34), can be aimed — rather than at silencing Avicenna's actual or potential Peripatetic critics, who were supposedly expecting a more uniform and traditional way of exposition in the different parts of this *summa*, and at extolling Avicenna's extraordinary intellectual capacities, as Gutas supposes — at emphasizing the unbridgeable difference, within the *Šifā* ', between the Logic, on the one hand, and the Physics and the Metaphysics, on the other (a difference *prima facie* scarcely noticeable, due to the character *per modum expositionis* of the work), and at shedding some suspicious light on the excessive originality of the Physics and Metaphysics. The quite surprising anti-Avicennian attitude that al-Ġūzġānī shows, in an astronomical work he authored, towards the most original and innovative aspects of Avicenna's astronomy (G. SALIBA, *Ibn Sīnā and Abū 'Ubayd al-Jūzjānī: The Problem of the Ptolemaic Equant*, «Journal of the History of Arabic Sciences», 4, 1980, pp. 376-403, repr. in In., *A History of Arabic Astronomy: Planetary Theories During the Golden Age of Islam*, New York University Press, New York 1994, pp. 85-112) can be significant in this regard: rather than showing an unprecedented development in al-Ġūzġānī's attitude towards Avicenna after this latter's death, it might display openly a tendency already present *in nuce* in his earlier Introduction to the *Šifā* '.

At the present stage of research, the issue is not so much whether al-Ğüzğānī is or not responsible for the recension of treatise V that I have called *Versio Vulgata*, since his involvement in such a process — if it really occurred — appears beyond doubt for the reasons mentioned above. The real issue is whether, assuming that the analysis proposed here is correct, al-Ğüzğānī produced this modification by his own exclusive initiative; or whether he acted on Avicenna's text at the end of a common discussion involving also other disciples of Avicenna, in order to bring into effect the outcomes of a shared reflection. On account of the passage of Avicenna's letter to Ibn Zayla quoted above, this second hypothesis cannot be discarded.

III.4 *How Faithful is the Latin Translation of Treatise V to its Arabic Model*

Although the evidence discussed above in section II.2.2.d comes very close to a mirror-image of the roster of chapters displayed by the Latin translation, no Arabic witness known so far is a precise replica of the Latin translation. An important issue to be discussed is therefore whether the Latin translation depends on an Arabic exemplar that conveys an otherwise unattested aspect of resemblance with the Latin translation (the complete merging of chapters V.4 and V.5 into a single structural unit) — an Arabic exemplar whose traces would be lost in the Arabic manuscript tradition — or this aspect of resemblance, which one looks in vain in the manuscripts of the *Ilāhiyyāt* known so far, may have a different explanation.

When reporting the content of the Tehran Millī manuscript mentioned above in section II.2.2.d — i.e. the Arabic codex that most resembles the Latin translation — Y. Maḥdāvī gives the reader the definite impression that this manuscript contains only seven chapters of treatise V, and that no structural unit corresponding to chapter V.5 of the *Versio Vulgata* is present in it⁴². By noticing this shortcoming in reporting the content of this manuscript, I don't intend in any way to derogate to the value of Maḥdāvī's pioneering bibliography, which remains an indispensable tool for the scholarly study of Avicenna still nowadays, more than sixty years after its publication, and whose aim was not to provide a codicological description of the Tehran Millī manuscript, but only to clarify by means of it the content of the *Šifā'*. If I mention the misrepresentation that the otherwise outstanding bibliography authored by Maḥdāvī generates in this specific point, it is just to ask: might the Latin translator have used an Arabic manuscript in which chapter V.5 was partially detached from chapter V.4 as in the Tehran Millī manuscript, and have consequently decided to omit it as a structural

⁴² MAḤDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā* cit., p. 168.

independent unit, by merging it with the previous chapter V.4, as Maḥdāvī did in his report of the Tehran Millī manuscript? This is not all inconceivable, especially if the Arabic exemplar of the Latin translation reported a list of seven chapters corresponding to the *Versio Latina* at the beginning of treatise V, as also the Tehran Millī manuscript does.

The question, in other words, is whether the Latin translation can be taken as the most reliable representative of the *Versio Latina* – and, therefore, whether the existence of an Arabic manuscript squarely corresponding to it can be confidently assumed, even in lack of available evidence – or, by contrast, some extent of creativity by the Latin translator – despite his generally faithful approach to the Arabic text that he is translating – has to be allowed. The question is not without consequences for the final issue I am going to discuss in the next section: an account of treatise V like the one displayed by the Tehran Millī manuscript, with its inchoative and germinal presence of an unaccomplished fifth chapter in between the seven chapters attested by the Latin translation, remains in principle more indicative of the original state of treatise V than the *Versio Vulgata*, for the reasons adduced in section III.1; but this kind of imperfect account would seemingly have few chances of being the original version of this treatise meant by Avicenna.

III.5 *How Close is the Versio Latina to the Authorial Version of the Ilāhiyyāt*

A crucial issue that future research is asked to investigate is the following: once ascertained that the *Versio Latina* has good credentials to be more original than the *Versio Vulgata*, can we exclude that there was another version of treatise V more ancient than the *Versio Latina*? In other words: is the originality of the *Versio Latina* relative (i.e. is it original only with respect to the *Versio Vulgata*) or also absolute? The evidence is ambivalent, and three sets of data should be considered.

i) The account of treatise V – as well as of the other treatises of the work – that Avicenna offers in the preliminary chapter I.4 of the *Ilāhiyyāt* does not provide sufficient information⁴³. This account is vague in a way, in so far as it merges the content of chapters V.1 and V.2 in the very long initial sentence;

⁴³ IBN SĪNĀ, *Al-Šifāʾ, al-Ilāhiyyāt* (1) cit., I.4, p. 26, 3–6 [= AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina*, I-IV cit., p. 29.39–44]: «[a] In this place it is proper to acquaint ourselves with the state of the universal and the particular, the whole and the part; the manner of existence of the universal natures; whether they have an existence in external particulars; the manner of their existence in the soul; and whether they have an existence separate from [both] external [particular] things and the soul. [b] Here we would acquaint ourselves with the state of genus and species and the like » (cf. M. E. MARMURA, *Avicenna, The Metaphysics of The Healing. A parallel English-Arabic text*, Brigham Young University Press, Provo (Utah) 2005, p. 20).

imprecise in another, since it places within treatise V a topic ('the whole and the part') which, as such, is dealt with *ex professo* by Avicenna in treatise IV and only resumed in treatise V⁴⁴; and elliptic in a crucial respect, because it reports very succinctly in the brief last sentence the content of the remaining chapters of the treatise. In general, chapter I.4 of the *Ilāhiyyāt* gives a very fluid outline of the ten treatises of the work, in which some topics are mentioned 'out of place', i.e. with regard to a part of the work to which in fact they are not treated, and in which no articulation in treatises and chapters is explicitly given⁴⁵. This chapter corresponds to one of the preliminary issues faced by the Greek commentators of Aristotle in late antiquity⁴⁶, and is apparently meant to provide the reader with a sketchy overview of the entire exposition, emphasizing its main tenets in the context of a global picture, rather than with a comprehensive and detailed account of it, so that no precision and completeness in specific areas should be expected from it. In particular, the succinct cumulative mentions of chapters V.3-9 in the final sentence («the state of genus and species and the like») leaves the reader with no clue about the present issue⁴⁷.

ii) A careful inspection reveals that the Versio Latina is not itself free from structural problems shared with the Versio Vulgata. To begin with, chapter V.4 presents midway a quite lengthy transitional passage, in which Avicenna first draws a comprehensive *status quaestionis* of the issue he is dealing with, and then declares the ensuing agenda⁴⁸. There is no reason to doubt the authenticity

⁴⁴ Avicenna deals with whole and part, in general terms, in IV.3, whereas he touches upon the relation of universal and particular, on the one hand, with whole and part, on the other, at the end of V.2.

⁴⁵ See the reconstruction provided in the notes to the translation in *Libro della Guarigione, Le Cose Divine di Avicenna* (Ibn Sīnā) cit., pp. 175-180.

⁴⁶ See BERTOLACCI, *The Reception of Aristotle's Metaphysics* cit., pp. 169-170.

⁴⁷ One might see the independent mention of 'species' after 'genus' in this passage as congruent with the presence of an autonomous chapter on species (V.5) in the Versio Vulgata, and therefore incongruous with the Versio Latina. However, given the frequent references to *both* genus *and* species in chapter V.3, one could also take the joint mention of genus and species in the final sentence of our passage as a reference to chapter V.3 alone, in such a way that all the topics that Avicenna addresses in the following chapters of treatise V would fall, in chapter I.4, under the rubric 'and the like'. In an opposite direction, one could suppose that the mention of 'species', after 'genus', in this passage of chapter I.4 might have prompted Avicenna's disciples to cut off an independent chapter devoted to this universal in the actual structure they assigned to treatise V in the Versio Vulgata. The textual evidence at stake is very thin and can be read in either way.

⁴⁸ IBN SİNÄ, *Al-Šifā', al-Ilāhiyyāt* (I) cit., V.4, p. 225.5-10 [= AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina*, V-X cit., p. 261.87-93] : « We have made known the nature of the universal, how it exists [= V.1-2], and how the genus, among them [i.e. the universals] differs from matter [= V.3], according to a way [of investigation] from which other ways [of investigation] — which we will expound later — can branch out. We have [also] made known which things the genus contains among those through which it is specified [= previous part of V.4]. Two investigations, connected

of this passage, which is similar to other transitional passages frequent in Avicenna's works. But this kind of thematic break (mention of previous topics and of forthcoming themes) is unusual in the middle of a chapter penned by Avicenna, at least in the *Šifā'*, and seems to mark the beginning of a new textual unit. This break, however, has no structural counterpart either in the *Versio Latina* or in the *Versio Vulgata*, in both of which no additional textual unit within chapter V.4 can be found. Moreover, chapter V.5 in the *Versio Latina*, corresponding to chapters V.7 and V.8 in the *Versio Vulgata*, starts with the exposition of a lengthy and articulated objection regarding the commonly accepted view of definition, an objection which is subsequently rejected⁴⁹. Now, both in the *Versio Latina* and in the *Versio Vulgata* this objection is not preceded by a positive account of definition: the chapter immediately preceding chapter V.5 in the *Versio Latina*, i.e. chapter V.4 — resulting from the conflation of chapters V.4 and V.5 in the *Versio Vulgata* — deals cumulatively with genus and species; likewise, the chapter immediately preceding chapter V.7 in the *Versio Vulgata* (V.6) deals with specific difference. Now, such an abrupt incursion into a 'dialectical' issue is unusual for Avicenna, since he usually faces objections and provides their refutations after having positively expounded his own standpoint on a certain topic⁵⁰. These two structural anomalies shed some doubtful light on the pretension of the *Versio Latina* of witnessing Avicenna's original account of treatise V.

(iii) A more positive scenario for the *Versio Latina* emerges from the following considerations. First, the *Versio Latina* is in no way the only variation of the *Versio Vulgata* of treatise V known to date: at least three further variations of the *Versio*

with what we are dealing with, remain. The first is [investigating] which things the genus contains among those that do not specify it. The second is [investigating] how this unification [i.e. the unification that conveys the specification of the genus] takes places, and how one single thing, realized in act, comes to be from the genus and the differentia, which are two [distinct] things » (cf. MARMURA, *Avicenna, The Metaphysics of The Healing* cit., p. 172). See BERTOLACCI, *How Many Recensions* cit., pp. 284-287, Text 1 and Text 2.

⁴⁹ IBN SİNĀ, *Al-Šifā', al-Ilāhiyyāt* (1) cit., V.7, p. 236.4-9 [= AVICENNA LATINUS, *Liber de Philosophia prima sive Scientia divina*, V-X cit., p. 265.64-72]: « Someone may say: Definition, as those engaged in the art [of logic] agree, is composed of genus and differentia, each of the two being separate from each other, their sum constituting the two parts of the definition. [Now,] definition is nothing other than the quiddity of the thing defined. As such, the relation of the meanings that are denoted by the genus and differentia to the nature of the species is the same as their relation in definition to the thing defined. And, just as genus and species are the two parts of the definition, likewise their two meanings constitute the two parts of the thing defined. If this, then, is the case, it would be incorrect to predicate the nature of the genus of the nature of the species, because it is part of it » (MARMURA, *Avicenna, The Metaphysics of The Healing* cit. p. 180).

⁵⁰ See BERTOLACCI, *The Reception of Aristotle's Metaphysics* cit., pp. 240-245.

Vulgata of this treatise are attested by more than one Arabic codex⁵¹, whereas other variations are restricted, as far as we can presently judge, to single manuscripts, and can be regarded as peculiarities of their individual bearers⁵². Of the structural variations of the Versio Vulgata of treatise V witnessed by distinct manuscripts, however, the Versio Latina is the most relevant, in various respects: in terms of comprehensiveness and complexity, since it is the only variation embracing four of the nine chapters of the treatise according to the Versio Vulgata, which it both merges and transposes; in terms of solidity, since it is the only variation free from all the three structural problems displayed by the Versio Vulgata; and in terms of width and reliability of the evidential basis, since it is the only variation attested both in Latin and in Arabic by testimonia that are more numerous and more ancient than in the other cases⁵³.

Second, even though no structural configuration of treatise V attested in manuscripts is totally satisfactory and free from problems, we should not think of the original text of the *Ilāhiyyāt*, and, more in general, of the *Šifā'*, as a version of the work totally congruent with the author's ideal plan. The *Šifā'*

⁵¹ a) The first of the recurrent variations is determined by the splitting of chapter V.4 into two distinct units, precisely where the transitional passage in question occurs, as in the already mentioned Ms. Berlin, Deutsche Staatsbibliothek, Minutoli 229 (see BERTOLACCI, *How Many Recensions* cit., pp. 284-287). In no manuscript conveying this variation, however, the new chapter resulting from the bipartition of chapter V.4 bears a title of its own. The two other recurrent variations regard: b) the placement of chapters V.8 and V.9 before chapter V.7, and their occasional merging under the title of V.9 (see, for example, Ms. Istanbul, Nuruosmaniye Kütüphanesi, 2709, 886-97H/1481-9); and c) the placement of chapter V.9 between chapter V.6 and V.7 (see, for example, Ms. Qum, Kitābhānah-i Maš'ūd-i A'zam, 1760, 1078H/1667-8). In case a), the transitional passage within chapter V.5 is granted structural significance. Both in case b) and in case c), chapter V.7 is no more the beginning of the treatment of definition within treatise V, in such a way that its dialectical start results unproblematic.

⁵² A case in point is the structural variation of treatise V in ms. Ankara, National Library B153, considered in BERTOLACCI, *How Many Recensions* cit., pp. 291-293. This and other variations witnessed by single manuscripts are not taken into consideration in the present article. In general, with respect to the other treatises of the *Ilāhiyyāt*, treatise V exhibits in manuscripts a particularly high number of structural configurations different from the Versio Vulgata. Such a proliferation might depend on the existence of two very early alternative recensions of this treatise (the Versio Latina and the Versio Vulgata, if our analysis is correct), which possibly, by their contrast, paved the way and triggered the production of other versions of this treatise; conversely, this efflorescence of versions might also indicate some deep and unresolved original problem affecting the structure of treatise V, as we are going to see.

⁵³ By contrast, the three recurrent variations of the Versio Vulgata of treatise V additional to the Versio Latina regard at most two chapters of the Versio Vulgata, respond to only one of the structural problems discussed in this paper (namely one of the two structural problems common to Versio Latina and Versio Vulgata), and are not attested by Latin testimonia, lists of chapters, or known quotations by later authors; the extant manuscripts attesting these variations are later than those supporting the Versio Latina, although they occasionally depend on ancient exemplars.

is an extremely extensive writing, which underwent a process of composition in which — for at least some parts of the work — Avicenna availed himself of the cooperation of his school, as his biography attests; moreover, being later than the encounter of Avicenna with al-Ġūzġānī, the work must have been affected by this latter's activity of secretary and editor. In other words, we cannot exclude the possibility of structural anomalies affecting the archetype of the *Šifā'* in the case of treatise V, as in the case of other controversial *loci* of the work, as the result of an infelicitous interaction between the author and his disciples in the process of production of the final text of the places in question. Historical reports inform us of the messy situation of the holographs of some of Avicenna's works, which looked extremely cryptic to his disciples and defeated their capacity of understanding⁵⁴: it is not far-fetched to imagine that some passages of Avicenna's draft of the *Šifā'* — if not transcribed by the author himself into a clean copy, as it seems it was his habit — similarly escaped the comprehension of the disciples deputed to 'edit' it, as well as the master's control of the disciples' work, and were licensed inadvertently at variance with respect to the author's blueprint.

Thus, although not free from structural anomalies, the *Versio Latina* should not *a priori* be denied the status of first version of treatise V authored by Avicenna in the framework of his school and with the assistance of his disciples. For sure, it is the main variation of the *Versio Vulgata* of treatise V known to date, and it looks more original than this latter for the reasons seen above. This being the case, even though probably it does not altogether agree with Avicenna's original intentions, the *Versio Latina* of treatise V might date back to the earliest phase of the transmission of the *ilāhiyyāt*, and has to be considered attentively by future editors of the work.

CONCLUSION

The old adagio 'tradurre è tradire' ('translation is betrayal') does not apply to the *Philosophia prima*. In its case, the contrary is true. On the one hand, the Latin translation of Avicenna's *ilāhiyyāt* looks firmly rooted in the Arabic tradition also when it arranges treatise V, on universals, according to a structure that is different from the one commonly found in the majority of codices and in current printings (*Versio Vulgata*). The most recent manuscript research has disclosed further instances of the evidence on the basis of which an Arabic background for the

⁵⁴ Avicenna's biography reports the disciples' inability to transform Avicenna's holograph of the *Lisān al-'Arab*, after the master's death and in lack of a clean copy by the master himself, into a text suitable for diffusion (*The Life of Ibn Sina* cit., p. 73; this passage of the biography is discussed by S. Di Vincenzo in her contribution to the present volume).

Latin version of treatise V had already been tentatively argued (lists of chapters that correspond precisely to the structure of treatise V in the Latin translation); moreover, it has brought to light Arabic codices whose text matches almost exactly the profile of Treatise V as it is exhibited by the Latin translation, and a way of referring to the articulation of treatise V by some of Avicenna's first disciples and followers (al-Lawkarī) that mirrors some key aspects of the Latin translation. The complex of this evidence represents the *Versio Latina*, some of whose Arabic witnesses are more ancient than, or coeval with, the Latin translation.

On the other hand, the Latin translation of Avicenna's *Ilāhiyyāt*, rather than conveying a distorted image of its source, does in fact witness a stage of the text of treatise V of the work that is arguably more original than the one that we currently read in the *Versio Vulgata*, thus having better credentials than this latter to be authored by Avicenna himself, and that may even go back to the very first account of this treatise produced by Avicenna in the context of his school. The same school is probably responsible for the replacement of the *Versio Latina* with a *Versio Vulgata* more suitable to didactic purposes and, possibly, also to the ideological options of Avicenna's followers, *in primis* of his biographer and secretary al-Ġūzġānī. The *Versio Vulgata*, sponsored and disseminated by Avicenna's disciples, gained wider diffusion than the *Versio Latina*, but was not able to efface completely this latter.

The critical edition of the *Philosophia prima* by S. Van Riet, after forty years since the publication of its first volume (1977), inevitably shows some limits: besides the shortcomings regarding the editor's understanding and methodological use of the so-called 'double lessons' of the Latin translation, evidenced by R. Arnzen in the present volume, some other flaws are pointed out by the present contribution: they regard the unavoidable choice of the Cairo printing of the *Ilāhiyyāt* – the only text of the work available in print to scholars at the time – and, hence, of the *Versio Vulgata* that it conveys, as point of reference of the Latin text, both in the Latin-Arabic apparatus and in the lexica. Nonetheless, the pioneering edition that the Belgian scholar started publishing four decades ago within the framework of the *Avicenna Latinus* series that she initiated has substantially promoted and oriented the very same research that now envisages the necessity of a step forward. On account of this indisputable merit, S. Van Riet's edition deserves to be acknowledged as an epoch-making landmark of the scholarship on in the field.

APPENDIX

Conspectus of the earliest extant dated Arabic manuscripts
of the *Ilāhiyyāt* of Avicenna's *Kitāb al-Šifā'* (V-VI/XI-XII c.)

1. 496H/1102-3: Najaf, Maktabat al-Imām Amīr al-Mu'minīn, 3070 (+ $\mathfrak{t}_{\text{vi,III.8-vii}}$) (+ *Adwiya Qalbiyya*_{2,9}) [it contains: *Ilāhiyyāt* I.1-6; I.8-III.1; III.8-IX.2]
2. 509H/1115 (20 Rabi' II/19 September), place of copy: Baghdad: Tehran, Kitābhānah-i Millī Malik, 1085
3. 535H/1141 (27 Šawwal/5 June): Cairo, Dār al-Kutub al-Miṣriyya, Aḥmad Taymūr Pāšā 140 (+ $\mathfrak{t}_{\text{vi-vii}}$)
4. 561H/1166 or 571H/1175: Oxford, Bodleian Library, Pococke 125 (+ \mathfrak{t} , with a lacuna regarding chapters $\mathfrak{t}_{\text{i,1.6-7}}$) (+ *Adwiya Qalbiyya*_{2,9})
5. 587H/1191-2: Patna, Khudā Bakhsh Oriental Public Library (Bankipur), (Catalogue vol. XL, 3467, Library's handlist 2979) [it contains: *Ilāhiyyāt* I.1-end]
6. VI/XII (second half, *terminus ante quem*): [Arabic exemplar of the Latin translation]

LEGENDA:

\mathfrak{t} = *Ṭabī'īyyāt* (= *natural philosophy*) of the *Šifā'*.

(+ \mathfrak{t}) = ms. containing *Ilāhiyyāt* and *Ṭabī'īyyāt*.

Within *Ṭabī'īyyāt*, the sections (*funūn*) are designed by lower-case Roman numerals (i, ii, iii, etc.) written as deponents (ex. gr.: $\mathfrak{t}_{\text{ii-viii}}$ = sections ii-viii of *Ṭabī'īyyāt/natural philosophy*).

Within *Ilāhiyyāt* and *Ṭabī'īyyāt*, the treatises (*maqālāt*) and chapters (*fuṣūl*) are designed respectively by upper-case Roman numerals (I, II, III, etc.) and Arabic numerals (1, 2, 3, etc.) (ex. gr.: *Ilāhiyyāt* I.1-3 = chapters 1-3 of treatise I of *Ilāhiyyāt*; $\mathfrak{t}_{\text{i-ii.1-2}}$ = section i and chapters 1-2 of section ii of *Ṭabī'īyyāt/natural philosophy*).

(+ *Adwiya Qalbiyya*_{2,9}) = ms. containing within the *Ṭabī'īyyāt* chapters 2-9 of the medical treatise *Maqāla fī l-Adwiya al-qalbiyya* (*On Cardiac Remedies, De medicinis cordialibus* in Latin).

[*italics within square brackets*] = ms. attested.

For further information, see www.avicennaproject.eu, section 'Manuscripts/List (chronological)', as of July 2017 (<http://www.avicennaproject.eu/index.php?id=61>).

ABSTRACT

The Latin Translation and the Original Version of the Ilāhiyyāt (Science of Divine Things) of Avicenna's Kitāb al-Šifā'

The present article analyzes the evidence available in Arabic sources (preliminary lists of contents in manuscripts; texts of manuscripts; later quotations) that supports the hypothesis according to which the medieval Latin translation of the metaphysics of Avicenna's *Kitāb al-Šifā'* is rooted in its Arabic background when it conveys an account of treatise V of the work (called 'Versio Latina') alternative to the one that can be found in the majority of codices and in current printings ('Versio Vulgata'). It is argued (i) that the Versio Latina is probably more original than the Versio Vulgata, for doctrinal and philological reasons; (ii) that the Versio Vulgata might respond to a deliberate intention to make the content of treatise V more compliant with the account of universals provided by Avicenna himself in the logic of the *Šifā'* and, in general, with the traditional pre-Avicennian ways of expounding the doctrine of universals; (iii) and that the Versio Vulgata was likely the product of Avicenna's school, rather than of Avicenna himself, as the result of shared concerns and theoretical debates that prompted the decision of modifying Avicenna's original text through the intervention, in all likelihood, of al-Ğūzğānī. Two further issues are conclusively discussed: (iv) how precisely the Latin translation relates to the Arabic background of the Versio Latina, (v) and whether the Versio Latina can be taken as the outlook of treatise V intended and licensed by Avicenna, or it also conveys elements of later, non authorial modifications.

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NICOLA POLLONI

Gundissalinus and Avicenna: Some Remarks on an Intricate Philosophical Connection

Dominicus Gundissalinus is a peculiar figure in the twelfth-century cultural landscape. Born in the Iberian Peninsula between 1115 and 1125, he received his philosophical education in Chartres possibly under Thierry of Chartres and William of Conches as many traces in his original productions indicate¹. At least since 1148, Gundissalinus was archdeacon of Cuéllar, a village not far from Segovia, where supposedly he was resident until 1161². Then, he moved to Toledo, where he was based from 1162. This fact is to be linked to the presence, in the Castilian town, of the Jewish philosopher Abraham ibn Daud. As pointed out by Bertolacci³, Ibn Daud's translation of the prologue to Avicenna's *Liber sufficientiae* — i.e., the *Kitāb al-Šifā'* — is to be seen as an invitation to the Toledan archbishop, John II, to sponsor and support a series of translations into Latin of Avicenna's work. As a result, Gundissalinus arrived in Toledo, his presence probably required there by the same archbishop with the purpose of collaborating with Ibn Daud on the 'Avicenna project', the first accomplishment of which was the Latin translation of Avicenna's *De anima*, realized before 1166⁴.

¹ Cf. N. HÄRING, *Thierry of Chartres and Dominicus Gundissalinus*, « *Mediaeval Studies* », 26, 1964, pp. 271-286; K. M. FREDBORG, *The Latin Rhetorical Commentaries by Thierry of Chartres*, Pontifical Institute of Medieval Studies, Toronto 1988; EAD., *The Dependence of Petrus Helias' Summa super Priscianum on William of Conches' Glosae super Priscianum*, « *Cahiers de l'Institut du Moyen Âge grec et latin* », 11, 1973, pp. 1-57; A. FIDORA, *Le débat sur la création: Guillaume de Conches, maître de Dominique Gundisalvi?*, in B. OBRIST, I. CAIAZZO eds., *Guillaume de Conches: Philosophie et science au XII siècle*, SISMEL - Edizioni del Galluzzo, Firenze 2011, pp. 271-288; N. POLLONI, *Thierry of Chartres and Gundissalinus on Spiritual Substance: The Problem of Hylomorphic Composition*, « *Bulletin de Philosophie Médiévale* », 57, 2015, pp. 35-57; and ID., *Elementi per una biografia di Dominicus Gundisalvi*, « *Archives d'Histoire Doctrinale et Littéraire du Moyen Âge* », 82, 2015, pp. 7-22.

² See L. M. VILLAR GARCÍA, *Documentación medieval de la Catedral de Segovia (1115-1300)*, Universidad de Salamanca, Salamanca 1990, p. 109, n. 61.

³ A. BERTOLACCI, *A Community of Translators. The Latin Medieval Versions of Avicenna's Book of the Cure*, in C. J. MEWS, J. N. CROSSLEY eds., *Communities of Learning. Networks and the Shaping of Intellectual Identity in Europe 1100-1500*, Brepols, Turnhout 2011, pp. 37-54.

⁴ The translation of *De anima*, indeed, is accompanied by a dedicatory letter to John II, who died in 1166: for this reason, there is no doubt that the *terminus ante quem* of this translation is to be found in that year and, consequently, that the *De anima* is the first complete translation of a work by Avicenna realised in Toledo by Gundissalinus. See also N. POLLONI, *The Toledan Translation Movement and Gundissalinus: Some Remarks on His Activity and Presence in Castile*, in Y. BEALE-RIVAYA, J. BUSIC eds., *Companion to Medieval Toledo. Shared Common Places (Toledo, 711-1517)*, forthcoming.

Gundissalinus remained in Toledo until 1181, the year in which he supposedly finished his work as translator and left the Castilian town⁵. After that date, indeed, he probably returned to Segovia, where he is attested in 1190 participating at the cathedral chapter, the last witness we have to his life. During the twenty years Gundissalinus spent in Toledo, he worked on the Latin translation of approximately twenty works, made by working in tandem with Ibn Daud and Johannes Hispanus⁶.

The translations were realized in a biphasic process of verbal rendering of the Arabic into Iberian Vernacular and then from Vernacular into written Latin⁷. Naturally Gundissalinus was responsible of the second part of this process, while Ibn Daud and Johannes Hispanus were dedicated to the first part. Some passages of Gundissalinus's original writings, where the author presents calques of excerpts from the Arabic sources different from the Latin translations, seem to indicate that Gundissalinus, at least in a later period of his life, learned Arabic⁸.

The translations realised by Gundissalinus have some peculiarities in comparison to the work by Gerard of Cremona. While the latter worked on an evidently larger number of translations, with a variety of authors and disciplines

⁵ M. ALONSO ALONSO, *Notas sobre los traductores toledanos Domingo Gundisalvo y Juan Hispano*, «*al-Andalus*», 8, 1943 pp. 155-188.

⁶ See D. N. HASSE, A. BÜTTNER, *Notes on Anonymous Twelfth-Century Translations of Philosophical Texts from Arabic into Latin on the Iberian Peninsula*, in D. N. HASSE, A. BERTOLACCI eds., *The Arabic, Hebrew, and Latin Reception of Avicenna's Physics and Cosmology*, Berlin - Boston 2017, forthcoming.

⁷ See M.-T. D'ALVERNY, *Les traductions à deux interprètes, d'arabe en langue vernaculaire et de langue vernaculaire en latin*, in G. CONTAMINE ed., *Traduction et traducteurs au Moyen Âge. Actes du colloque international du CNRS organisée à Paris, Institut de recherche et d'histoire des textes, les 26-28 mai 1986*, Éditions du CNRS, Paris 1989, pp. 193-206; C. BURNETT, *Literal Translation and Intelligent Adaptation amongst the Arabic-Latin Translators of the First Half of the Twelfth Century*, in B. M. SCARCIA AMORETTI ed., *La diffusione delle scienze islamiche nel Medio Evo Europeo*, Accademia Nazionale dei Lincei, Roma 1987, pp. 9-28; and C. BURNETT, *Translating from Arabic into Latin in the Middle Ages: Theory, Practice, and Criticism*, in S. G. LOFTS, P. W. ROSEMAN eds., *Éditer, traduire, interpreter: essais de méthodologie philosophique*, Peeters, Louvain 1997, pp. 55-78.

⁸ This possibility seems to be corroborated by some textual traces suggesting that Gundissalinus used the original Arabic text of Avicenna's *Ilāhiyyāt*. See N. POLLONI, *Aristotle in Toledo: Gundissalinus, the Arabs, and Gerard of Cremona's Translations*, in C. BURNETT, P. MANTAS eds., *'Ex Oriente Lux'. Translating Words, Scripts and Styles in the Medieval Mediterranean World*, CNERU, Córdoba 2016 (*Arabica Veritas*, IV), pp. 147-185. This could explain the authorship, attested by the manuscript tradition, of some Latin translations to Gundissalinus alone: and the acquisition of Arabic is a necessary, though not sufficient, condition to state this point. The attributions of the Latin manuscripts, indeed, should not be taken as a proof of Gundissalinus's knowledge of Arabic, since the name of the translating collaborator could have been missed by the tradition. In this way, new examinations of the tradition of every single work translated by Gundissalinus should be made at some point in the future, in order to clarify this point, together with an overall analysis of the different textual versions of the excerpts presented by Gundissalinus in his original production.

(from philosophy to geomancy), Gundissalinus worked only on philosophical texts and those mostly of Arabic authors, both Islamic and Jewish. In this respect, Avicenna plays a key role among the translations produced by Gundissalinus, since he worked on the Latin translation of the *De anima*, *Liber de philosophia prima*, the first three books of the *Physica*, parts of the *Isagoge* and *Posterior Analytics*, excerpts from *Meteora*, the *De medicinis cordialibus*, and the pseudo-Avicennian *Liber celi et mundi*. All of these texts, in interconnection with further Latin and Arabic sources, mainly Ibn Gabirol and al-Fārābī, have a specific textual and doctrinal influence on Gundissalinus's original philosophical production.

Avicenna is the author who, for the number of writings translated and their complexity, would in many respects define Gundissalinus's Toledan work as translator and philosopher. In this connection Abraham ibn Daud's position as a convinced Avicennist, who had first-hand knowledge of Arabic philosophy should be recalled. Ibn Daud supplied, probably, the organisation and made decisions as to what texts were to be translated. Furthermore, and even more importantly, it was he who interpreted the texts in the Arabic-into-Vernacular part of the biphasic translating method adopted in Toledo. The role played by the Jewish philosopher is pivotal, and Ibn Daud influenced also Gundissalinus's original philosophical productions, especially though his criticism of Ibn Gabirol's ontology⁹.

Traditionally, six original writings have been attributed to Gundissalinus: *De unitate et uno*¹⁰, *De scientiis*¹¹, *De immortalitate animae*¹², *De anima*¹³, *De divisione philosophiae*¹⁴, and *De processione mundi*¹⁵. The list of Gundissalinus's works,

⁹ Cf. N. POLLONI, *Glimpses of the Invisible: Doctrines and Sources of Dominicus Gundissalinus' Metaphysics*, forthcoming.

¹⁰ GUNDISSALINUS, *De unitate et uno*, ed. P. CORRENS, *Die dem Boethius fälschlich zugeschriebene Abhandlung des Dominicus Gundisalvi De unitate*, «Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters», 1/1, 1891, pp. 3-11; GUNDISSALINUS, *El Liber de unitate et uno*, ed. M. ALONSO ALONSO, «Pensamiento», 12, 1956, pp. 69-77; and GUNDISSALINUS, *De unitate et uno*, ed. M. J. SOTO BRUNA, C. ALONSO DEL REAL, *De unitate et uno de Dominicus Gundissalinus*, EUNSA, Pamplona 2015.

¹¹ GUNDISSALINUS, *De scientiis*, ed. M. ALONSO ALONSO, Editorial Maestre, Madrid - Granada 1954.

¹² GUNDISSALINUS, *De immortalitate animae*, ed. G. BÜLOW, *Des Dominicus Gundissalinus Schrift Von der Unsterblichkeit der Seele*, «Beiträge zur Geschichte der Philosophie des Mittelalters», 2/3, 1897, pp. 1-38.

¹³ GUNDISSALINUS, *De anima*, ed. J. T. MUCKLE, *The Treatise De anima of Dominicus Gundissalinus*, «Mediaeval Studies», 2, 1940, pp. 23-103; and GUNDISSALINUS, *De anima*, ed. C. ALONSO DEL REAL, M. J. SOTO BRUNA, *El Tractatus de anima atribuido a Dominicus Gvund[is]salinus*, EUNSA, Pamplona 2009.

¹⁴ GUNDISSALINUS, *De divisione philosophiae*, ed. L. BAUR, «Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters», 4/2, 1903, pp. 3-142.

¹⁵ GUNDISSALINUS, *De processione mundi*, ed. G. BÜLOW, *Des Dominicus Gundissalinus Schrift Von dem Hervorgange der Welt*, «Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters», 24/3, 1925, pp. 1-56; and D. GUNDISSALINUS, *De processione mundi*, ed. M. J. SOTO BRUNA, C. ALONSO DEL REAL, *De processione mundi. Estudio y edición crítica del tratado de D. Gundisalvo*, EUNSA, Pamplona 1999.

nevertheless, has undergone a certain degree of reassessment in the last six decades, as a consequence of the problematization of the manuscript tradition. In the first place, at least one further work should be added to the list, that is, the *Liber mahameleth* whose production is directly related to Gundissalinus's circle as pointed out by Charles Burnett and the editor of the text, A. M. Vlasschaert¹⁶. The *Liber mahameleth* is a peculiar treatise which deals mainly with the practical application of arithmetical and algebraic operation to everyday life, with a specific interest in commerce. Nonetheless, since this writing does not have a philosophical nature, and its author is to have been amongst the members of the 'Gundissalinus's circle' and, perhaps, not Gundissalinus himself, it will not be considered in the present analysis. Another work that is to be linked to Gundissalinus's team is, with all probability, the anonymous treatise *On the Peregrination of the Soul in the Afterlife* discovered by d'Alverny: this work is dependent on Gundissalinus's writings in a very peculiar way, but since the authorship of this writing has not been demonstrated yet, the *Peregrinatio* will not be discussed here either¹⁷.

The attribution of the *De immortalitate animae* to Gundissalinus has also been called into question. The hypothesis of a different authorship, rather than the Toledan philosopher, is rooted on the twofold manuscript tradition of this treatise, that ascribes the work to both Gundissalinus and William of Auvergne. While the critical editor, Bülow, produced a *stemma codicum* which claims Gundissalinus's authorship, some scholars, particularly, A. Masnovo and B. Allard¹⁸, have criticised this attribution (and the *stemma codicum*), proposing William as the author of the *De immortalitate animae*. Even though further data seem to oppose this last hypothesis, I shall not consider the treatise as a work by Gundissalinus.

Finally, the specific problems arising from the consideration of Gundissalinus's *De scientiis* should be underlined. In this respect, there is no doubt about the attribution: the author is Gundissalinus. The problem, nonetheless, resides on

¹⁶ See *Le Liber mahameleth*, critical edition by A. M. VLASSCHAERT, Steiner, Stuttgart 2010; and *Liber mahamelet*, critical edition by J. SESIANO, Springer, Berlin 2014.

¹⁷ M.-T. D'ALVERNY, *Les pérégrinations de l'âme dans l'autre monde d'après un anonyme de la fin du XII^e siècle*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 13, 1940-1942, pp. 280-299.

¹⁸ See A. MASNOVO, *Da Guglielmo d'Auvergne a san Tommaso d'Aquino*, Vita e Pensiero, Milano 1945-6, pp. 119-123; B. ALLARD, *Note sur le De immortalitate animae de Guillaume d'Auvergne*, « Bulletin de philosophie médiévale », 18, 1976, pp. 68-72; and Id., *Nouvelles additions et corrections au Répertoire de Glorieux: à propos de Guillaume d'Auvergne*, « Bulletin de philosophie médiévale », 10-12, 1968-70, pp. 79-80.

the stylistic and, consequently, epistemic nature of the *De scientiis*. The work is, essentially, a Latin version of al-Farabi's *Kitāb Ihṣā' al-'Ulūm*. Gerard of Cremona produced a literal and comprehensive Latin translation of this Farabian work¹⁹. In comparison to Gerard's version, Gundissalinus's *De scientiis* presents a wide degree of textual and doctrinal alteration, for Gundissalinus cuts many passages he did not agree with, modifies other parts of the text, and in general re-shapes the whole writing into something that has a hybrid literary statute, for it is neither a pure translation nor an actual original writing. All the same, the problems regarding the status of the *De scientiis* does not affect the present study since there is no substantial influence of Avicenna in this writing, textual or doctrinal.

A reliable attribution to Gundissalinus's authorship can be stated, therefore, for four philosophical writings: *De unitate et uno*, *De anima*, *De divisione philosophiae* and *De processione mundi*. In these four texts is condensed Gundissalinus's attempt to renovate the Latin discussion on three main topics: psychology, epistemology and metaphysics, and in all these three aspects, Avicenna plays a primary role.

Gundissalinus's *De anima* tries to give an overall account of the soul, from the problem of its origins, to its powers and its knowledge once separated from the body. In doing so, Gundissalinus uses mainly three sources: Quṣṭa ibn Luqā's *Differentia animae et spiritus*, Avicenna's *De anima*, and Ibn Gabirol's *Fons vitae*, which are accompanied by a number of Latin authorities, amongst whom Augustine features. This syncretic tendency to melt together different traditions and perspectives is even stronger in the epistemological treatise *De divisione philosophiae*. This treatise, as the title suggests, is focused on the articulation of knowledge. Gundissalinus's purpose in writing on the overall articulation of knowledge entails the use of a vast number of sources on which a complete epistemological system could, and should, be based.

Furthermore, Gundissalinus dedicates two treatises to metaphysics, the *De unitate et uno* and *De processione mundi*. The *De unitate* is short: Gundissalinus discusses almost exclusively the theme of Oneness, and then, the metaphysical difference between pure Unity and derived unity. The main source, here, is Ibn Gabirol's *Fons vitae*, from which Gundissalinus took, besides the doctrine of universal hylomorphism, Ibn Gabirol's cosmological progression. These features are joined to Boethius's authority stating that «quicquid est, ideo est, quia

¹⁹ See AL-FĀRĀBĪ, *Über die Wissenschaften / De scientiis: Nach der lateinischen Übersetzung Gerhards von Cremona*, ed. F. SCHUPP, Felix Meiner Verlag, Hamburg 2005.

unum est»²⁰ a kind of thematic refrain in the *De unitate*. In the *De processione mundi*, written after the *De unitate*, Gundissalinus presents his own cosmological synthesis, and tries to resolve some of the most controversial problems discussed in his time by a *Timaeus*-based viewpoint basically using Avicenna's and Ibn Gabirol's ontologies.

THE TEXTUAL PRESENCE OF AVICENNA IN GUNDISSALINUS'S WORKS

Gundissalinus makes a wide use of Avicenna's writing, presented through quotations and implicit references to his works. Nonetheless, Gundissalinus pursues a kind of *alteration strategy* while quoting Avicenna and his other Arabic sources²¹. Gundissalinus's relation with his Arabic sources is marked by a peculiar twofold approach. The Toledan philosopher is, at one and the same time, a translator from Arabic into Latin, and *the* translator of many of the sources upon which he bases his own philosophical reflection. From this perspective, the traditional problem of the interpretative freedom of the translator — or better, the hermeneutical stratification to which the translated text is exposed — finds a particular outcome. Gundissalinus interprets the original text while translating it into Latin, and then, he re-interprets the same text when he uses (and quotes) it in his original production. And since Gundissalinus's works are for the most part *collationes* of quotations, whose text only rarely corresponds literally to that of the sources he is quoting, the recognition of this discrepancy offers a thorny problem to the scholarship dealing with Gundissalinus.

In the first place, Gundissalinus's use of his sources is marked by blind quotations. In the *De processione mundi* alone, there are more than one hundred direct quotations of excerpts derived from Arabic and Latin authors, and none of them makes explicit reference to its original source. On the contrary, Gundissalinus inserts on some occasions false references to Aristotle, while quoting other authors, especially Avicenna²². For example, in the *De anima*, when Gundissalinus states that:

«Ex his igitur manifestum est quod cum nec vita nec una perfectionum sive bonitatum retenta sit apud primum principium in prima genitura, sicut Aristoteles dixit, tamen non omne corpus est receptibile vitae quia caret aptitudine recipiendi eam»²³.

²⁰ GUNDISSALINUS, *De unitate et uno*, ed. CORRENS, p. 3, 8-9

²¹ Cf. N. POLLONI, *Gundissalinus on Necessary Being: Textual and Doctrinal Alterations in the Exposition of Avicenna's Metaphysics*, «Arabic Sciences and Philosophy», 26/1, 2016, pp. 129-160.

²² Cf. POLLONI, *Aristotle in Toledo: Gundissalinus, the Arabs, and Gerard of Cremona's Translations* cit.

²³ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, p. 116, 9-13.

He is actually quoting a passage from Avicenna's *De medicinis cordialibus*, where Gundissalinus could read:

«Nec vita nec ulla perfectionum aut bonitatum est retenta apud primum principium in prima genitura, sed receptibilia quandoque sunt carentia aptitudine recipienti ea ...»²⁴.

This is just one example of Gundissalinus's attitude towards the quotations he makes and the references which accompany them. It should be added to this that Gundissalinus's most common stylistic manoeuvre is to isolate sentences from the context of the original source and integrate them in a new context, often composed of a variety of isolated quoted sentences, whose horizon of meaning is sensibly different from the original. On some occasions, the purpose of quoting such short sentences, without displaying any relevant content, is completely unclear. On other occasions, this attitude corresponds to Gundissalinus's attempt to produce a theoretical synthesis between doctrinal cores he perceived as opposite to each other.

Not all the quotations presented by Gundissalinus, though, are short or melded with other textual sources. In some occasions, and basically when using materials from Avicenna's works, Gundissalinus quotes large excerpts, even entire chapters. The length of these excerpts is directly related to the theoretical relevance they have in Gundissalinus's work, that is, the doctrinal role played by Avicenna's quotations in three works: *De processione mundi*, *De anima*, and *De divisione philosophiae*. Leaving aside the *De immortalitate animae*, whose authorship is still dubious, and the *De scientiis*, which is a 'creative translation' of al-Fārābī's *Kitāb Ihṣā' al-'Ulūm*, one should mention the reasons for the absence of Avicenna from the one treatise left, the *De unitate et uno*, before passing on to analyse his presence in the other three works.

Gundissalinus's *De unitate* is with all probability one of the first works he wrote. It is almost completely dependent on Ibn Gabirol's *Fons vitae*, with little influence from other sources and an even less critical attitude toward the implicit consequences of Ibn Gabirol's cosmological system and ontology. In this rather short treatise, though, there seems to be at least one trace of Avicenna, namely in the following passage, where Gundissalinus discusses the different ways by which one can understand composed unity:

²⁴ AVICENNA, *De medicine cordialibus*, critical edition by S. VAN RIET, in AVICENNA, *Liber de anima seu sextus de naturalibus*, 2 vols., Peeters - Brill, Louvain - Leiden 1982, vol. II, p. 188, 9-14.

«Alia dicuntur unum aggregatione, ut populus et grex, congeries lapidum vel acervus tritici. Alia dicuntur proportionem unum, ut rector navis et gubernator civitatis dicuntur unum similitudine officii»²⁵.

This passage appears to be derived from Avicenna's *Liber de philosophia prima*, also translated by Gundissalinus. In book III, chapter 2, while discussing the same topic, Avicenna states that:

«Unum autem aequalitate est comparatio aliqua, sicut hoc quod comparatio navis ad rectorem et civitatis ad regem una est: hae enim duae comparationes consimiles sunt, nec est earum unitio per accidens, sed est unitas quaedam in qua uniuntur per accidens, unitas navis et civitatis, et per illas est unitas per accidens; unitas enim duarum dispositionum non est unitas quam posuimus unitatem per accidens»²⁶.

Gundissalinus — if he is dependent on the *Liber de philosophia prima* — sensibly simplifies Avicenna's line of reasoning. Moreover, it is interesting to notice that the two passages display a crucial lexicographical difference: while Avicenna's text refers to *rector* and *rex* as the two beings forming this kind of unity, the *De unitate* uses the terms *rector* and *gubernator*. Now, since the original Arabic text of the *Liber de philosophia prima* reads 'wa-hāl al-madīna 'inda l-malik wāḥida', thus the correct Latin rendering should be *rex*. There are many possible explanations for this inconsistency between the two excerpts, and possibly Gundissalinus had a mediated access to this passage (admitting that it is the actual source) thanks to Abraham ibn Daud. For the absence of any further quotations and, especially, of any doctrinal influence of Avicenna on the *De unitate et uno*, it could be supposed that the *Liber de philosophia prima* still had to be translated into Latin. Indeed, the *De processione mundi*, written after the *De unitate*, offers a more profound reception of Avicenna's metaphysics.

As for textual quotations, the *De processione mundi* presents at least two direct quotations of works by Avicenna, extremely different to each other. The first quotation presented by Gundissalinus²⁷ covers almost entirely chapter 6 and 7 of the first book of the *Liber de philosophia prima*²⁸. Through this Gundissalinus expounds Avicenna's demonstrations of the unrelated Oneness of the Necessary Existent, and the very doctrine of necessary and possible being upon which

²⁵ GUNDISSALINUS, *De unitate et uno*, ed. CORRENS, p. 9, 20-23

²⁶ AVICENNA, *Liber de philosophia prima*, critical edition by S. VAN RIET, Peeters, Louvain 1977, p. 113, 95-01.

²⁷ GUNDISSALINUS, *De processione mundi*, ed. BÜLOW, pp. 5, 15 - 16, 22.

²⁸ AVICENNA, *Liber de philosophia prima*, ed. VAN RIET, pp. 43, 21 - 55, 55.

Gundissalinus's overall ontology is based on the *De processione*. This vast and dense quotation offers also a flavour of Gundissalinus's alteration strategy through which the very quotations are inserted on the newly produced writing²⁹. The textual comparison between the two excerpts reveals Gundissalinus's creative spirit, through which he modifies the quoted text in different ways and basically by:

- changing the order of the paragraphs;
- subtly modifying the lexicon used;
- altering Avicenna's line of reasoning on at least one occasion³⁰.

It should be supposed that, by changing the quoted text in this manifold way, Gundissalinus is aiming at a specific purpose or purposes. In the first place, Gundissalinus's concern regarding the consistency of the theoretical outcomes of the writing he is working on should be assumed. The insertion of any quoted excerpt must meet some implicit criteria of consistency with the overall writing on which it is presented, and in particular, with the other texts quoted by Gundissalinus. This concern might be the origin of Gundissalinus's change of parts of the quoted passage. Moreover — and this is eminently displayed by Gundissalinus's *De scientiis* — the Toledan philosopher could have disagreed with some passages of the source he is using, and thus could have preferred to cut those passages while quoting the source (or translating it, in the case of the *De scientiis*). Furthermore, Gundissalinus, in this case, is quoting a work he has translated into Latin. Some factors could be in play in such a dynamic. First, Gundissalinus could find his previous translation as not completely satisfactory anymore, and then re-translate the text from the Arabic while quoting. Or probably Gundissalinus is engaged in polishing his previous Latin translation while quoting the text in his original writing.

²⁹ It is extremely important to stress, here, that the textual comparison between two medieval versions of the same work (or, in this case, two version of the same excerpt) has to be structurally problematized by taking into account the possible corruption of the transmission of the text. That is to say, the simple comparison between critical edited texts is not sufficient for asserting the voluntary modification of lexical or even doctrinal elements. For this reason, while the recognition of some voluntary alterations by Gundissalinus is patent (for example, the change in the order of the paragraphs of the quoted text, or the modification of doctrinal passages in order to make the quoted text consistent with Gundissalinus's writing where it is presented), not every difference between the text of the source and the quoted text should be considered a voluntary alteration. See POLLONI, *Gundissalinus on Necessary Being* cit.

³⁰ For an overall analysis of these alterations, see POLLONI, *Gundissalinus on Necessary Being* cit. The appendix to the article (pp. 149-160) also presents a textual comparison between the two versions of these passages in Avicenna's *Liber de philosophia prima* and Gundissalinus's *De processione mundi*.

The *De processione mundi* offers another direct quotation of a work written by Avicenna, this time from the *Physica*. While discussing the doctrine of universal hylomorphism — possibly the most important point of Gundissalinus's ontology — the Toledan philosopher states:

«Ex hoc enim, quod est in potentia receptibilis formarum, vocatur yle, et ex hoc, quod iam in actu est sustinens formam, subiectum vocatur. Sed non sicut in logica subiectum accipitur, cum substantia describitur. Yle enim non est subiectum hoc modo, sed est subiecta formae, et ex hoc, quod est communis omnibus formis, vocatur vel massa vel materia; et ex hoc, quod alia resolvuntur in illam, quoniam ipsa est simplex pars omnis compositi, vocatur elementum, quemadmodum et in aliis. Et ex hoc, quod ab illa incipit compositio, vocatur origo; sed cum incipitur a composito, et pervenitur ad illam, vocatur elementum»³¹.

This passage is a direct quotation of Avicenna's *Physica*, book I, translated by Gundissalinus, and which reads:

«Et haec hyle, secundum hoc quod est in potentia receptibilis formae aut formarum, vocatur hyle et, secundum hoc quod est in actu sustinens formam, vocatur subiectum. Non autem hic accipimus subiectum sicut in logica quando definiebatur substantia, quia hyle non est subiectum ex hoc intellectu ullo modo et, secundum hoc quod est communis omnibus formatis, vocatur materia vel massa et, secundum hoc quod resolvuntur in illa et est ipsa pars simplex receptibilis formae totius compositi, vocatur elementum. Similiter etiam quicquid est sicut illud et secundum hoc quod ab illa incipit compositio, vocatur origo; similiter etiam quicquid est aliud quod est sicut illa: fortasse enim, quando incipitur ab ea, vocatur origo, quando autem incipitur a compositio et pervenitur ad illam, vocatur elementum quia elementum est simplicior pars compositi»³².

Gundissalinus's quotation displays a certain degree of simplification of the original text, from both a syntactical and doctrinal point of view. All the same, it should be noticed that the Avicennian excerpt is surrounded, in the receiving writing, by a conspicuous number of direct quotations of Ibn Gabirol's *Fons vitae*, making of this passage from the *Physica* a kind of explanatory addendum of universal hylomorphism.

A similar use of Avicennian materials can be detected in Gundissalinus's epistemological treatise *De divisione philosophiae*. This work, too, presents a wide

³¹ GUNDISSALINUS, *De processione mundi*, ed. BÜLOW, p. 31, 6-16.

³² AVICENNA, *Liber primus naturalium. Tractatus primus de causis et principiis naturalium*, critical edition by S. VAN RIET, Peeters - Brill, Louvain - Leiden 1992, pp. 21, 60 - 22, 72.

number of blind quotations from many writings of the Arabic and Latin traditions, quotes melded together in a similar fashion to the *De processione mundi*. The role played by Avicenna in the *De divisione philosophiae* is crucial also, since Gundissalinus's division of the sciences is rooted on the Avicennian theory of subalternation. As for the *De processione*, the main doctrinal task is pursued by Gundissalinus through the quotation of a large excerpt that, in the economy of the *De divisione*, takes the title *Summa Avicennae de convenientia et differentia subiectorum*³³, or perhaps from a more accurately philological point of view, as proposed by J. Janssens, *Summa Avicennae de convenientia et differentia scientiarum praedictarum*³⁴.

This large quotation presents Avicenna's doctrine of subalternation and its value is pivotal, for this passage grounds, explains, and justifies the overall discussion presented by the Toledan philosopher in the *De divisione*. Another important factor to consider is that the *Summa Avicennae* is a Latin translation of chapter seven of the second part of Avicenna's *Kitāb al-Burhān*, from the *Šifā'*'s book on logic: the only extant Latin translation of this writing. In this case, the remarks made above regarding Gundissalinus's aim at polishing and adapting his previous translation of the quoted text cannot be repeated: it is not known whether the quotation from *Kitāb al-Burhān* was preceded by a non-extant translation of the whole writing by Gundissalinus or not, even though it does not seem to be the case.

Gundissalinus's *De divisione philosophiae* displays further quotations from Avicenna's works, mainly derived from the *Liber de philosophia prima*. A striking example of the textual influence of this writing on the *De divisione* is provided by Gundissalinus's discussion of metaphysics as first philosophy, about which he claims:

« Multis modis haec scientia vocatur. Dicitur enim 'scientia divina' a digniori parte, quia ipsa de Deo inquit, an sit, et probat, quod sit. Dicitur 'philosophia prima', quia ipsa est scientia de prima causa esse. Dicitur etiam 'causa causarum', quia in ea agitur de Deo, qui est causa omnium. Dicitur etiam 'metaphysica', i.e. 'post physicam', quia ipsa est de eo, quod est post naturam. Intelligitur autem hic

³³ GUNDISSALINUS, *De divisione philosophiae*, ed. BAUR, pp. 124, 5 - 133, 24.

³⁴ Cf. J. JANSSENS, *Le De divisione philosophiae de Gundissalinus: quelques remarques préliminaires à une édition critique*, in E. CODA, C. MARTINI BONADEO eds., *De l'antiquité tardive au Moyen Âge: études de logique aristotélécienne et de philosophie grecque, syriaque, arabe et latine offertes à Henri Hugonnard-Roche*, Vrin, Paris 2014, pp. 559-570. See also H. HUGONNARD ROCHE, *La classification des sciences de Gundissalinus et l'influence d'Avicenne*, in J. JOLIVET, R. RASHED eds., *Études sur Avicenne*, Les Belles Lettres, Paris 1984, pp. 41-75, ivi 42.

natura virtus, quae est principium motus et quietis : immo est virtus et principium universorum accidentium, quae proveniunt ex materia corporali. Unde, quia haec scientia dicitur ‘post naturam’, haec posteritas non est quantum in se, sed quantum ad nos. Primum enim, quod percipimus de eo, quod est, et scimus eius dispositiones, natura est; unde quod meretur vocari haec scientia considerata in se, hoc est, ut dicatur, quod est scientia de eo, quod est ante naturam. Ea enim, de quibus inquiritur in illa, per essentiam et per scientiam sunt ante naturam»³⁵.

This passage is textually based on two passages, at least, of the first book of Avicenna’s *Liber de philosophia prima*: Avicenna’s discussion of *philosophia prima* as science of the cause of being³⁶ (second chapter) of which Gundissalinus cuts any reference to metaphysics as the science of ‘ens inquantum est ens’ — ; and Avicenna’s remarks on the priority or posterity of metaphysics in itself and for us (third chapter)³⁷. This influence appears to be even stronger when considering Gundissalinus’s further definitions of metaphysics as ‘scientia de rebus separatis a materia definitione’³⁸; ‘philosophia certissima et prima’³⁹; ‘sapientia certissima’⁴⁰; and ‘sapientia’⁴¹.

³⁵ GUNDISSALINUS, *De divisione philosophiae*, ed. BAUR, p. 38, 7-23.

³⁶ AVICENNA, *Liber de philosophia prima*, ed. VAN RIET, pp. 15, 86 - 16, 1: « Igitur quaestiones huius scientiae quaedam sunt causae esse, inquantum est esse causatum, et quaedam sunt accidentaliter esse, et quaedam sunt principia scientiarum singularum. Et scientia horum quaeritur in hoc magisterio. Et haec est philosophia prima, quia ipsa est scientia de prima causa esse, et haec est prima causa, sed prima causa universitatis est esse et unitas; et est etiam sapientia quae est nobilior scientia qua apprehenditur nobilior scitum: nobilior vero scientia, quia est certitudo veritatis, et nobilior scitum, quia est Deus, et causae quae sunt post eum; et etiam cognitio causarum ultimarum omnis esse, et cognitio Dei, et propterea definitur scientia divina sic quod est scientia de rebus separatis a materia definitione et definitionibus, quia ens, inquantum est ens, et principia eius et accidentaliter eius, inquantum sunt, sicut iam patuit, nullum eorum est nisi praecedens materiam nec pendet esse eius ex esse illius. Cum autem inquiritur in hac scientia de eo quod non praecedit materiam, non inquiritur in ea nisi secundum hoc quod eius esse non eget materia ».

³⁷ AVICENNA, *Liber de philosophia prima*, ed. VAN RIET, pp. 24, 45 - 25, 57: « Nomen vero huius scientiae est quod ipsa est de eo quod est post naturam. Intelligitur autem natura virtus quae est principium motus et quietis, immo et universitatis eorum accidentium quae proveniunt ex materia corporali est virtus. Iam autem dictum est quod natura est corporis naturalis quod habet naturam. Corpus vero naturale est corpus sensibile cum eo quod habet de proprietatibus et accidentibus. Quod vero dicitur post naturam, hoc posteritas est in respectu quantum ad nos: primum enim quod percipimus de eo quod est et scimus eius dispositiones est hoc quod praesentatur nobis de hoc esse naturali. Unde quod meretur vocari haec scientia, considerata in se, hoc est ut dicatur quod est scientia de eo quod est ante naturam: ea enim de quibus inquiritur in hac scientia per essentiam et per scientiam sunt ante naturam ».

³⁸ GUNDISSALINUS, *De divisione philosophiae*, ed. BAUR, p. 35, 16.

³⁹ *Ibid.*, p. 35, 17.

⁴⁰ *Ibid.*, p. 35, 18.

⁴¹ *Ibid.*, pp. 35, 18 - 36, 8.

A similar attitude toward Avicenna's texts can be seen at work in Gundissalinus's *De anima*, with some differences. This writing is dedicated to the discussion of the soul from its definition to its ontological composition, immortality, and psychological powers. As mentioned above, the main sources on which this work is based are basically three: Qusta Ibn Luqa's *De differentia spiritus et animae*, Ibn Gabirol's *Fons vitae*, and Avicenna's *De anima*, which is also the main and almost exclusive source of the two final chapters, where Gundissalinus finally deals with the psychological powers of the vegetative, sensitive, and intellective soul⁴². Indeed, a close consideration of these two chapters displays that Gundissalinus completely relies on Avicenna's writing: the text of the treatise is developed as a *collatio* of different excerpts from Avicenna's homonymous work, derived mostly from book I and V⁴³. Nonetheless, while the presence of Avicenna's *De anima* is wide, many of his further works seems to have influenced Gundissalinus's psychological writing: a fact that can possibly be explained by the relatively early date of composition of Gundissalinus's *De anima*.

The works by Avicenna play, therefore, an enveloping, primary, and unequivocal role in the original writings of the Toledan philosopher. The presence of direct quotations from Avicenna's works is vast and diffusive, and exceeds the exemplar cases discussed here. And through this presence, the doctrines and theories elaborated by Avicenna come to be crucial for Gundissalinus's original speculation.

THE DOCTRINAL INFLUENCE OF AVICENNA ON GUNDISSALINUS'S REFLECTIONS

Gundissalinus's speculation is a comprehensive attempt at updating the philosophical debate contemporary to him through the assimilation of the new doctrines and sources derived by the Arabic-into-Latin translation movement. Gundissalinus translates, reads, studies, and sometimes criticises the Arabic sources he uses, and while his reflection is aimed at resolving some crucial problems of the Latin tradition — concerning the soul, the division of sciences, the constitution of reality — the temporal development of his own philosophical reflection is marked by some changes of perspective and doctrinal problematizations. By this point of view, the encounter with Avicenna is pivotal for Gundissalinus, and from the translation of the *De anima* up to that of the *Physica*, the Toledan philosopher shapes his reflections in the shadow of Avicenna.

⁴² GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, pp. 178, 3 - 288, 14.

⁴³ Cf. D. N. HASSE, *Avicenna's De anima in the Latin West. The Formation of a Peripatetic Philosophy of the Soul (1160-1300)*, Warburg Institute, London 2000, p. 191.

Gundissalinus's reading of Avicenna's works is rather different from that of later philosophers such as Albert the Great or Thomas Aquinas. Gundissalinus is the first Latin philosopher to deal with Avicenna's speculation, and from a perhaps ingenuous perspective. Gundissalinus is not interested in doctrines that will be the focus of the subsequent reception of Avicenna's writings, such as the discussion of the difference between essence and existence, the perpetration of the species through the individuals, or the theory of the indifference of essences. Other doctrines toward which Gundissalinus displays a certain interest, do not find any real degree of problematization, as if Gundissalinus would not have been able to see the problems arising from the acceptance of these theories. One of the most renowned cases of this attitude is Gundissalinus's acceptance of Avicenna's theory of the separate active intellect⁴⁴.

In all these cases, Avicenna is the main author through whom Gundissalinus tries to give his own account of psychology, epistemology, and metaphysics. Through analysis of Gundissalinus's original production, it is possible to grasp how Avicenna is used to resolve problems arising from Gundissalinus's own adhesion to further Arabic doctrines, as, for example, his acceptance of Ibn Gabirol's perspective in cosmology and ontology.

From the consideration of the sources used, the style presented, and the cross-textual analysis, it can be said that the *De unitate et uno* and the *De scientiis* are the first works to be written by Gundissalinus⁴⁵. The comparison of these two works with Gundissalinus's mature development of the same topics in his *De processione mundi* and *De divisione philosophiae* displays how relevant is the contribution of Avicenna to Gundissalinus's reflections. This aspect is particularly evident regarding the metaphysical works written by the Toledan philosopher.

The theoretical core of the *De unitate* is the discussion of the metaphysical concept of unity and oneness: every single thing can be said to be one through the participation to unity, and thus, by being one, that thing can be said to be⁴⁶. The main and almost exclusive source of Gundissalinus's discussion of this topic is Solomon Ibn Gabirol's *Fons vitae*. The debt to Ibn Gabirol's writing is striking, since Gundissalinus receives and develops from the *Fons vitae* both the doctrine of universal hylomorphism and the cosmological progression of the hypostases.

⁴⁴ As we are going to see, it is extremely likely that Gundissalinus felt this doctrine as potentially problematic: but his solution to this arising problem will be only an entangled scheme of references to the traditional doctrine of illumination in order to show the consistency between Avicenna and the Latin tradition.

⁴⁵ See POLLONI, *Glimpses of the Invisible* cit.

⁴⁶ GUNDISSALINUS, *De unitate et uno*, ed. CORRENS, p. 3, 2-9.

The first problem Gundissalinus has to resolve is the explanation of the modality through which a thing participates of unity, and this entails the problem of the ontological composition of the created being. Being derives from the form ('omne esse ex forma est')⁴⁷, but form can cause being/existence only if and when it has a matter to join. Therefore, being is a consequence of the union of matter and form: it is the very existence of form with matter. In this ontological dynamic, unity is the very causal bond that keeps together matter and form, and thus, unity appears as the fundamental ontological factor of existence. It is unity, and unity only, that makes possible any hylomorphic union in virtue of which a thing is said to exist, and when that bond is removed, the thing is indeed dissolved; it does not exist anymore⁴⁸.

The crucial role played by unity is explained by the consideration of matter. In itself, matter naturally tends to dispersion, its nature is to be multiplied, divided and fractioned. Matter, therefore, is the very contrary of unity, and because of this, unity is necessary in order to establish and maintain every created being, since only unity can hold the matter and keep it united to the form. Unity always accompanies matter in the hylomorphic compound: unity is the very form that is joined to matter, and that's why it is said that being is caused by the form⁴⁹.

Nonetheless, the unity/form immanent to the created being is a derived unity, caused by the first Unity that is God. It is through God's will that any created thing is one thing, and everything tends to be one and to join the One, since everything desire to be and they can be only by being one⁵⁰. At the same time, the derived unity is ontologically 'other' than divine One. Every caused being has to be different from its cause, while the actual Unity is eternal, immutable and alien to any diversity, the derived unity had to suffer multiplicity, diversity, and mutability: the created unity had to be joined to matter, the principle of multiplicity and change.

⁴⁷ *Ibid.*, p. 3, 10-15: « Omne enim esse ex forma est, in creatis scilicet. Sed nullum esse ex forma est, nisi cum forma materiae unita est. Esse igitur est nonnisi ex coniunctione formae cum materia. Unde philosophi sic describunt illud dicentes: esse est existentia formae cum materia. Cum autem forma materiae unitur, ex coniunctione utriusque necessario aliquid unum constituitur ».

⁴⁸ *Ibid.*, p. 4, 8-11: « Quapropter sicut unitate res ad esse ducitur, sic et unitate in illo esse custoditur. Unde esse et unum inseparabiliter concomitantur se et videntur esse simul natura ».

⁴⁹ *Ibid.*, p. 5, 10-12: « Ac per hoc unitas per se retinet materiam. Sed quod per se retinet, non potest facere separationem. Forma ergo existens in materia, quae perficit et custodit essentiam cuiusque rei, unitas est descendens a prima unitate, quae creavit eam ».

⁵⁰ *Ibid.*, p. 4, 12-120: « Quia enim creator vere unus est, ideo rebus, quas condidit in hoc numero, dedit, ut unaquaeque habeat esse una. Ac per hoc, quia ex quo res habet esse, una est: ideo motus omnium substantiarum est ad unum et propter unum; et nihil eorum, quae sunt, appetit esse multa, sed omnia, sicut appetunt esse, sic et unum esse. Quia enim omnia esse naturaliter appetunt, habere autem esse non possunt, nisi sint unum, ideo omnia ad unum tendunt. Unitas enim est, quae unit omnia et retinet omnia diffusa in omnibus, quae sunt ».

Matter, though, is not the same everywhere. In its separation from its cause, that is, from God, matter suffers a kind of thickness and differentiation. Where it is closer to its cause, matter is subtle and simple, and unity can join it in a strong union, as in the celestial beings, that are indivisible in act and perpetual. In other regions of existence, further from its cause, matter is thicker and weaker, and unity can hardly keep its union with matter. By this, the lowest things are weak in existence, and they suffer generation and corruption⁵¹. Gundissalinus presents this dynamic of ontological degradation through the metaphors of the water that descends from its spring and becomes obscure and thick in the marshes and ponds; and that of the light that is weakened in its separation from the source of light, the latter referred to the progressive weakening of unity in its union with matter⁵².

This ontogenic dynamic explains the cosmological progression of the hypostases through various hylomorphic unions. Gundissalinus presents the same progression expounded by Ibn Gabirol in his *Fons vitae*. The first created being is the Intelligence, whose matter and form are simple and essentially indivisible. This unity is multiplied in the Soul, which suffers a certain degree of change and diversity, and then, through a progressive increase of multiplicity and change, the progression causes the following hypostases, up to the matter sustaining the quantity, the thickest of all matters⁵³.

The close connection between Gundissalinus's *De unitate* and Ibn Gabirol's *Fons vitae* is evident: the treatment of the metaphysical value of unity, as well as the overall description of the ontological composition and cosmological derivation, are derived from Ibn Gabirol, to which could be added only a few further sources, with a minor impact on Gundissalinus's discussion. Both Gabirolian theories

⁵¹ *Ibid.*, pp. 6, 26 - 7, 6: « Quae quia a prima unitate remotissima est, ideo spissa et corpulenta et constricta est et propter spissitudinem et grossitudinem suam opposita est substantiae superiori, quae est subtilis et simplex, quoniam illa est subiectum principii et initii unitatis, haec vero est subiectum finis et extremitatis unitatis. Finis vero multum distat a principio, quoniam finis non est dictus nisi defectus virtutis et terminus ».

⁵² Cf. *ibid.*, p. 7, 6-16.

⁵³ *Ibid.*, p. 6, 14-26: « Et ob hoc unitas, quae duxit ad esse materiam intelligentiae, est magis una et simplex, non multiplex nec divisibilis essentialiter; sed si divisibilis est, hoc siquidem accidentaliter est; et ideo haec unitas simplicior et magis una est omnibus unitatibus, quae ducunt ad esse ceteras substantias, eo quod immediate cohaeret primae unitati, quae creavit eam. Sed quia unitas subsistens in materia intelligentiae est unitas simplicitatis, ideo necessario unitas subsistens in materia animae, quia infra eam est, crescit et multiplicatur et accidit ei mutatio et diversitas, et sic paulatim descendendo a superiore per unumquemque gradum materiae inferior unitas augetur et multiplicatur, quousque pervenitur ad materiam, quae sustinet quantitatem, scilicet substantiam huius mundi ».

are assimilated by Gundissalinus in a quite ingenuous, non-problematised way. Universal hylomorphism, the basis of which is that every created being is composed of matter and form, is presented through an apparently quite simple dynamic: every being is derived by the union of matter and form/unity, and through the progressive separation from their cause, matter degenerates and becomes thick, while form/unity becomes weaker in its unitive ontogenic action upon matter. This dynamic, derived by Ibn Gabirol, suffers a certain degree of simplification in the *De unitate*. Nonetheless, Gundissalinus cannot avoid falling into the problematic implications of the hylomorphic theory presented in the *Fons vitae*: the problem of the multiplication of matter, the circularity of matter and form⁵⁴, and the non-intrinsic functional determination of the hylomorphic components implied by the latter⁵⁵. Problematic cores that are developed by both Gundissalinus and Ibn Gabirol through the doctrine of the plurality of substantial forms which accompany the first union of matter and unity, specifying the compound.

At the same time, the *De unitate* offers an early and possibly ingenuous reception of Ibn Gabirol's cosmology, presented through the hypostatical progression

⁵⁴ This Gabirolian theory, for which what is form of the upper degree of reality is matter of the lower degree of existence, seems to be accepted by Gundissalinus in the *De unitate*, for the references to a multiplicity of matters (*ibid.*, p. 7, 12-14: « Nam quia aliquid materiae est spirituale et aliquid eius corporale, est aliquid eius purum et lucidum et aliquid eius est spissum et obscurum... ») and to Ibn Gabirol's 'matter sustaining quantity' (*ibid.*, p. 6, 23-26: « ...et sic paulatim descendendo a superiore per unumquemque gradum materiae inferior unitas augetur et multiplicatur, quousque pervenitur ad materiam, quae sustinet quantitatem, scilicet substantiam huius mundi »), a point directly connected, in the *Fons vitae*, to the aforementioned theory. In his *De anima*, almost certainly written between the *De unitate* and the *De processione*, Gundissalinus accepts and exposes the circularity of matter and form, stating that: « Et notandum quia post primam universalem id quod est materia posteriorum, forma est priorum et quod est manifestius, forma est occulti, quia materia quo propinquior est sensui est similior formae, et ideo fit manifestior propter evidentiam formae et occultationem materiae, quamvis sit materia formae sensibilis » (GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, p. 144, 10-4).

⁵⁵ Cf. N. POLLONI, *Toledan Ontologies: Gundissalinus, Ibn Daud, and the Problems of Gabirolian Hylomorphism*, in A. FIDORA, N. POLLONI eds., *Appropriation, Interpretation and Criticism: Philosophical and Theological Exchanges Between the Arabic, Hebrew and Latin Intellectual Traditions*, Fidem, Barcelona - Roma 2017, pp. 19-49. The functional circularity of the hylomorphic components entails, by a logical point of view, the non-intrinsic functional determination of matter and form. Indeed, by stating that the form of the upper level is the matter of the lower, Ibn Gabirol implicitly determines both matter and form through the external function they serve and not by an intrinsic logical determination of their being. In this way, one should talk about material and formal functions rather than talk about matter and form, since a being x is said to be matter only when it serves the function of matter, and the very same being x is said to be form when it serves the function of form. And in a strict Gabirolian perspective, these functions are basically the material function of bearing the form, and the formal function of being borne by matter.

from the Intelligence to the Soul, Nature, the matter sustaining quantity and, then, the corporeal bodies. This cosmological description is grounded on Ibn Gabirol's hylomorphic theory and, in particular, on the functional circularity of matter and form he expounds. A progressive problematisation of the latter, then, would entail for the Toledan philosopher a reassessment of his cosmology.

Gundissalinus's perspective in the *De processione mundi* has changed, profoundly. Both the *De unitate* and the *De processione* aim at resolving one crucial problem: that of the ontological difference between Creator and creature, that is, the explanation of how the caused being is similar but substantially different from its cause. Gundissalinus's radical change of perspective is due to his final encounter with Avicenna's metaphysics. With the *De processione*, Gundissalinus displays a profound interest in and knowledge of Avicenna's theories, even though he has no hesitation in passing over in silence many fundamental doctrinal points he does not accept, beginning with Avicenna's 'limited' hylomorphism.

The origins of Gundissalinus's abrupt change in his position should probably be found in the influence his collaborator, Abraham ibn Daud, had on him. Ibn Daud was a learned Jewish philosopher, and his reflection on the issue is extremely close to Avicenna and al-Ġazālī's *Maqāṣid al-Falāsifa*⁵⁶. At the very same time, Ibn Daud is possibly the most strenuous critic of Ibn Gabirol's *Fons vitae* — especially of his universal hylomorphism —, and Ibn Daud attacks him throughout his *ha-Emunah ha-raham*⁵⁷. It would have been quite surprising if

⁵⁶ See R. FONTAINE, *In Defense of Judaism: Abraham Ibn Daud. Sources and Structure of ha-Emunah ha-Ramah*, Van Gorcum, Assen- Maastricht 1990; and EAD., *Abraham Ibn Daud: Sources and Structures of ha-Emunah ha-Ramah*, «Zutot», 2, 2002, pp. 156-163.

⁵⁷ See, for instance, ABRAHAM IBN DAUD, *ha-Emunah ha-Ramah*, ed. N. M. SAMUELSON, *The Exalted Faith*, by Abraham Ibn Daud, Fairleigh Dickinson, London - Toronto 1986, pp. 40, 4b19 - 41, 5b11: «Also, we understood the treatise of Rabbi Solomon ibn Gabirol, may he be remembered for a blessing, in which he aimed at bestowing benefit from philosophy for the same purpose. And he did not single out the nation [of Israel] alone [for benefit]. Rather, all finds of people are associated together by him in [this] matter [for benefit]. Despite this [notable intention] he introduced many words about one subject, so that [with regards to] his treatise to which we alluded, which is called The Source of Life, perhaps if its content were refined, his words could be included in [a treatise that is] less than one tenth of that treatise. Furthermore, he made use of syllogisms without being meticulous [to discover whether it is the case] that their premises are true. Whereas according to his view imaginary premises in the forms of a true syllogism are satisfactory, certainly their content is doubtful. Since he imagined that he could introduce a demonstration when [demonstrations] could not be introduced, he multiplied demonstrations, thinking that many demonstrations that are not true can stand in the place of one true demonstration. [...] I would not deprecate his words were it not [for the fact] that he spoke [what is] a great perversion against the nation. Whoever understood his treatise knows [this]. All of that treatise shows the weakness of his grade in philosophy, and he gropes in it like groping in the dark».

the opposed views of these two philosophers and collaborators, Ibn Daud and Gundissalinus, did not have any kind of reciprocal influence. It is possible to interpret Gundissalinus's *De processione mundi* as a kind of response to Ibn Daud's criticism against the ontological perspective backed by Gundissalinus in his *De unitate* (and *De anima*)⁵⁸.

The *De processione mundi* is a curious application of the 'metaphysical procedure' presented by Gundissalinus in his *De divisione philosophiae*, and derived from al-Fārābī⁵⁹. For this reason, the treatise has a twofold progression: an ascendant part, demonstrating the existence and ontological characteristics of God, and a descendant part, discussing the ontological composition of the created being and the creation of the world.

The human being has the necessary intellectual powers to know the 'invisible aspects' of God (*invisibilia Dei*) through the examination of the created beings: their composition, disposition, and cause⁶⁰. And indeed, through four proofs considering the opposed properties of the elements and the hylomorphic component — which entail an external composing cause — and examining the phenomena of generation and corruption, and potency and act — which imply an external efficient cause —, one has to admit the existence of a first Cause of the world⁶¹. God is, then, the efficient cause of everything, the prime mover that, echoing Boethius, «est prima et simplex causa, quae, cum sit immota, cunctis

⁵⁸ See POLLONI, *Glimpses of the Invisible* cit.

⁵⁹ See N. POLLONI, *Gundissalinus's Application of al-Fārābī's Metaphysical Programme. A Case of Epistemological Transfer*, «Mediterranea. International Journal on the Transfer of Knowledge», 1, 2016, pp. 69-106.

⁶⁰ Cf. GUNDISSALINUS, *De processione mundi*, ed. BÜLOW, p. 2, 4-9.

⁶¹ The existence of God as first cause is established through four demonstrations. The first proof of the existence of God is centred on the elements. Every sensible being is composed of elements, but some of them are characterised by their movement downward, others by a movement upwards. Thus, it is the existence of a cause composing their contrariety is necessary, and that composer of contrariety is the first cause. The second demonstration is focused on hylomorphic composition. Every corporeal being is composed of matter and form, but these components have opposed properties, contrary to each other. Therefore, an external cause composing them is necessary. The third proof considers generation and corruption: every composed thing is resolved into what composed it, and comes to be through what composed it. Nonetheless, it is impossible that something begins to be by itself: on the contrary, an external cause is always required to produce the existence of what is possible, and the inexistence of what is impossible. Finally, the fourth and final proof is based on the movement through potency and act. Since the passage from potency to act is a kind of movement, one must suppose the existence of a mover which acts as the efficient cause of that being, since nothing can be the efficient cause of itself. Therefore, there must be an external efficient cause and, avoiding a regress to infinite, one must admit the existence of an efficient cause of every caused being. Cf. *ibid.*, pp. 3, 11 - 5, 14.

aliis movendi est causa. Unde dicitur stabilis, quia manens dat cuncta moveri »⁶². The immobility, that is, immutability of the first cause implies its perfection, and his complete and perfect actualization. Indeed, Gundissalinus says, if God would move, that movement would be finalized to the reception of a perfection of which he would be lacking, and thus, to the actualisation of a potentiality not actualised in him. This is inadmissible: God is the unmoved cause of movement, constantly identical to itself, and therefore opposed to its effect in which any movement and any distinctions reside⁶³.

This consideration of God as self-sufficient leads to the fundamental characterisation of the first cause that Gundissalinus presents in his *De processione mundi*. This is the first pillar upon which Gundissalinus's overall metaphysical reflection is based in this writing, and constitute the crucial point of advance in comparison to his previous positions. This pivotal point is the characterisation of God as necessary Existent, and thus, Gundissalinus's adhesion to Avicenna's modal ontology and its distinction between possible and necessary being. The possible being is what can be but always requires a cause of its existence, for nothing can be the efficient cause of itself. This cause is the necessary being, or necessary Existent, uncaused cause of everything, which resolve the structural ontological ambiguity of the possible being, that can either be and not be, causing its existence. In this way, the possible being becomes a mediated necessary being, a *necesse esse per aliud*, that is, thanks to its cause⁶⁴.

In Avicenna's discussion, the doctrine of necessary and possible being is insolubly bound to the crucial distinction between essence and existence, and the inapplicability of such distinction to the necessary existent. This fundamental theory, which would be crucial for subsequent medieval philosophers, is completely absent from Gundissalinus's discussion, who eagerly accepts the theory of necessary and possible being, but passes over in silence Avicenna's distinction between essence and existence, among many other doctrines exposed in the *Philosophia prima*.

⁶² *Ibid.*, p. 17, 13-15.

⁶³ *Ibid.*, pp. 18, 25 - 19, 1: « Restat ergo, quod aliquid sit primum principium, quod nullo modo moveatur; et hoc est id, quod dicitur deus. Unde omnis motus est alienus ab essentia eius. Omnis vero motus est in opere eius, quemadmodum virtus in auctore quidem semper eadem componens et resolvens ».

⁶⁴ Among the many studies on Avicenna's ontology, see A. BERTOLACCI, *The Distinction of Essence and Existence in Avicenna's Metaphysics: The Text and Its Context*, in F. OPWIS, D. C. REISMAN eds., *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas*, Brill, Leiden 2012, pp. 257-288; O. LIZZINI, *Wuḡūd-Mawḡūd/Existence-Existent in Avicenna. A Key Ontological Notion of Arabic Philosophy*, « Quaestio », 3, 2003, pp. 111-138; and R. WISNOVSKY, *Avicenna's Metaphysics in Context*, Cornell University Press, Ithaca 2003.

Gundissalinus presents Avicenna's modal ontology through the quotation from chapters six and seven of the first book of Avicenna's *Liber de philosophia prima* mentioned above. Through this quotation, Gundissalinus expounds the five proofs of the unrelated Uniqueness and Oneness of the necessary Existent. Thanks to these demonstrations, and again, quoting Avicenna, Gundissalinus can finally state the fundamental ontological attributes of God:

« Constat ergo, quod necesse esse neque est relativum, neque est mutabile, nec multiplex, sed solitarium, cum nihil aliud participat in suo esse, quod est ei proprium; et hoc non est nisi solus deus, qui est prima causa et primum principium omnium, quod unum tantum necesse est intelligi, non duo vel plura »⁶⁵.

With the description of God as necessary Existent, Gundissalinus completes the first part of the Farabian metaphysical procedure he is applying. Following this scheme, he now re-descends to the analysis of the created being after having acquired a new perspective through which it will now be possible to analyse the visible creation. What Gundissalinus has gained from the first part of his discussion is quite simple: it is the position of the ontological difference between Creator and creatures in the terms of composed vs. composer; cause vs. caused; and possible vs. necessary being. Besides the very demonstrations of God's unrelated uniqueness, the core of Gundissalinus's exposition is the ontological difference between *possibile esse*, *necesse esse per se*, and *necesse esse per aliud*. And if this is the first pillar upon which Gundissalinus's reflection is based, the second one is certainly the universal hylomorphism.

Gundissalinus dedicates dense pages to the discussion of how matter and form are the ontological constituents of every caused being⁶⁶. Nonetheless, the universal hylomorphism presented in the *De processione mundi* is very different from what Gundissalinus expounds in his *De unitate* and *De anima*. The *De processione*, indeed, offers a polished, problematized, and developed version of universal hylomorphism, possibly not less marked by some implicit problems, but all the same Gundissalinus's desire to improve his ontology is patent. This desire is pursued through the theoretical merging between Avicenna's and Ibn Gabirol's ontologies.

Gundissalinus's line of reasoning is quite simple. In the first place, he claims that the ontological difference between God and creature is primarily expressed

⁶⁵ GUNDISSALINUS, *De processione mundi*, ed. BÜLOW, pp. 16, 23 - 17, 1.

⁶⁶ Cf. *Ibid.*, pp. 17, 11 - 36, 8.

by the cause-caused and necessary-possible dynamic. Following Avicenna, Gundissalinus states that the possible being is always caused. And since any causative process is always the actualization of a potency, therefore, the possible being is the very being in potency, while the necessary being *per aliud* is the actualisation of that potency, and the necessary being *per se* is the efficient cause, the act without previous potency presented by Thierry of Chartres⁶⁷. At the same time, Gundissalinus could easily find in Avicenna, al-Ġazālī, and Ibn Daud, the assertion by which every possible being is characterised by a structural ontological duality: the duality of essence and existence and, correlated to this, the duality made of its own ontological possibility and the necessity received from its cause. Gundissalinus takes inspiration from this doctrinal point, but chooses to replace this duality with another kind of structure: universal hylomorphism. It is not by chance that Gundissalinus presents God as the composing and efficient cause in the four proofs of God's existence at the beginning of the *De processione mundi*. Indeed, they are two aspects of one causative process: it is by composing matter and form that God causes the actual being, that is, the existence of any single thing. It is through the union of matter and form, both characterised by a potential being, that the two hylomorphic components and their compound receive actual being. For Gundissalinus, matter and form are, indeed, the ontological structure of the possible being, and thanks to their union, the compound is actualised and becomes a mediated necessary being, a *necesse esse per aliud*.

Gundissalinus's approach might easily be criticised as simplistic and ingenuous. His violent appropriation of Avicenna's doctrines and their fusion with Ibn Gabirol's, ignoring Avicenna's denial of any universal hylomorphism might also be remarked upon. Gundissalinus, nonetheless, is trying to resolve a specific question, and in doing this, he probably thought to be consistent with the tradition. On the one hand, Gundissalinus is facing the unsolved problem of the composition of spiritual substances discussed by Thierry of Chartres. On the other hand, he could find in al-Ġazālī's *Summa theoricæ philosophiæ* — translated by Gundissalinus himself — and in Ibn Daud's speculation some support for his theories, or at least recognise that they shared a common ground with him.

In his summary of Avicenna's philosophy, indeed, al-Ġazālī, explicitly bonds the structural duality of the possible being to hylomorphism, stating that its possibility is like matter and its necessity is like form, in a discussion implicitly

⁶⁷ See POLLONI, *Thierry of Chartres and Gundissalinus on Spiritual Substance* cit.

based on the comparison between matter and potency, and form and act⁶⁸. This position is very similar to that presented in Ibn Daud's *ha-Emunah ha-raham*, where the Jewish philosopher not only presents the compositions of spiritual substances as analogue to hylomorphism, but he specifically connects this point to the 'mistakes' made by Ibn Gabirol — and, following him, by Gundissalinus⁶⁹.

Gundissalinus tries to resolve the ambiguous status of spiritual substance through the simple admission that matter does not imply any corporeality for the composed being, but only possibility. This de-corporealisation of the effect matter has on hylomorphic being allows him to abandon the position stating a similarity of the structural duality of spiritual substance to matter and form, and claims that that duality is truly made of matter and form. Is this sufficient to resolve the oppositions, tensions, and unanswered problems deriving from the fusion between Avicenna's and Ibn Gabirol's ontologies in the *De processione mundi*? The answer is no: on the contrary, Gundissalinus's treatise is crammed with unexplained points and doctrinal strains, and possibly this is what makes the *De processione mundi* so fascinating in Gundissalinus's curious attempt.

The encounter with Avicenna and his 'commentators' — al-Ġazālī and Ibn Daud —, is significant for Gundissalinus. Indeed, the theory of modal ontology expounded in the *Liber de philosophia prima* gives him a way to improve his interpretation of universal hylomorphism, and a new centre upon which he could ground his

⁶⁸ See AL-ĠAZĀLĪ, *Summa theoricarum philosophiarum*, ed. J. T. MUCKLE, *Algazel's Metaphysics. A medieval translation*, Pontifical Institute of Medieval Studies, Toronto 1933, p. 120, 9-23: «Omne vero esse quod non est necesse esse, est accidentale quiditati. Unde opus est quiditate ad hoc ut esse sit ei accidentale. Igitur secundum considerationem quiditatis erit possibile essendi, et secundum considerationem cause, erit necesse essendi eo quod ostensum est quod quicquid possibile est in se, necesse est propter aliud a se; habet igitur duo iudicia scilicet, necessitatem uno modo, et possibilitatem alio modo. Ipsum igitur secundum quod est possibile, est in potencia, et secundum quod est necesse, est in effectu; possibilitas vero est ei ex se, et necessitas ex alio a se; est igitur in eo multitudo unius quidem quod est simile materie et alterius quod est simile forme. Quod autem est simile materie est possibilitas, et quod est simile forme est necessitas, que est ei ex alio a se».

⁶⁹ See ABRAHAM IBN DAUD, *Emunah ramah*, ed. SAMUELSON, p. 174, 152b14-153a9: «Rather, the dependence of the intellect's existence on something else indicates that it does not have in itself what is necessary of existence. Rather, it has what is possible of existence. Thus, in its substance there is what is complex for the intellect and it is like a composite of matter and form. The reason for this is that what it has from its substance is like matter, that is, possibility, and what it has from something else is like form. The thing that it contains is what it is, that is, necessity. Of the many substances that contain this attribute, some are ordered by others of them in order. They are the entities for whom ibn Gabirol, may he be remembered for a blessing, tried to establish the existence of hyle and form in the fifth book of his treatise. He did not explain what they have is something like hyle and something like form. Rather, he ordained that they have matter and form, and when he tried to establish this, he could not [do it]».

problematization of the ontological difference between God and creation. This 'departure' from Ibn Gabirol and the most problematic points of his ontology previously accepted by Gundissalinus, is further displayed by the abandonment of the cosmological progression presented in the *Fons vitae* and accepted in the *De unitate*. Now, Gundissalinus offers a different description of the cosmic establishment, merging together Hermann of Carinthia, Ibn Gabirol, and Ibn Daud⁷⁰, in a discussion where Avicenna's influence is still pervasive, even though not so evident⁷¹.

A very similar scenario is offered by the comparison between Gundissalinus's *De scientiis* and *De divisione philosophiae*, even though in this case the stylistic

⁷⁰ Gundissalinus's description of the cosmic establishment is quite peculiar, and bound to Avicenna and Ibn Gabirol, on the one hand, and Hermann of Carinthia's description of the cosmogonic causality, on the other hand. The creation of the world corresponds to the very creation of matter and form. Both the ontological constituents are eternally present in God's Wisdom and Essence, but their own potential being is actualised through their union in the first compound. This process is logically divided into two moments: the creation of matter and form, that is, their coming to be, and their union, that is the *primaria compositio* or first composition. While matter is only one in number, there is a plurality of forms joining matter. The first of these forms are the form of unity and that of substantiality, and their union with matter gives a sort of unspecified substance that, in a second logical moment, receives the forms of spirituality and corporeality, that cause the spiritual and corporeal substance. All this process is the *primaria compositio*, and the outcomes of this causal dynamic are three first species of creatures, called *primaria genitura*, that are caused directly by God and, thus, are perpetual: the angelic creatures, the celestial spheres, and the elements. One should notice that the distinction between *creatio* and *primaria compositio* is only (onto-)logical (i.e., 'analytical', as opposed to the 'realist' interpretation of the following degrees of cosmic causation whose description is referred to the existence of actual beings). Indeed, matter and form have an actual being only in the hylomorphic compound, and Gundissalinus clearly claims that the first actual being is the three species of the *primaria genitura*, caused by the dynamic of material information by the first forms called *primaria compositio*. The *primaria genitura* performs the secondary causation in the cosmic establishment. Indeed, the angels move the celestial spheres and daily create new souls. The spheres, through their movement, create the mixtures of which the sublunary bodies are composed. And finally, the elements, or better, the force which orders them, that is, nature, operate the alterations of the corporeal beings. Thanks to this interdependent dynamic, the *primaria genitura* performs the *secundaria compositio* and the *generatio* of all the following beings, characterised by a temporal duration marked by generation and corruption.

⁷¹ Avicenna's cosmology seems to have a direct influence on Gundissalinus. On the one hand, indeed, some textual passages display that Gundissalinus relies in the *Liber de philosophia prima* regarding the causative action performed by the separate substances or intelligences, as one can easily notice in *De processione mundi*, p. 54, 19-24, where Gundissalinus states: « Quia igitur ex prima materiae et formae copula trina suboles progenita est, scilicet intelligentia et caelestia corpora et quattuor elementa, ita prima causa omnia movet, sed diverso modo. Quaedam enim movet per se nullo mediante et quaedam non per se, sed mediantibus aliis. Principaliter enim per se nullo mediante intelligentiam movet ». On the other hand, this causal dynamic is not made explicit by Gundissalinus whom, regarding this point, seems to be unclear. Cf. POLLONI, *Glimpses of the Invisible* cit.

peculiarities of the former make the analysis more complicated⁷². The articulation of sciences proposed by the *De scientiis* can be seen as an update of the traditional Latin articulation of knowledge. The treatise offers the discussion of five groups of disciplines, beginning with grammar⁷³, then logic⁷⁴, mathematics⁷⁵, natural philosophy and metaphysics⁷⁶, and finally some disciplines of practical philosophy⁷⁷ (politics and juridical science). All these sciences have a sub-articulation in disciplines, regarding which Gundissalinus follows al-Fārābī's discussion. In this way, the Toledan philosopher integrates into the articulation of knowledge some 'new' sciences, as the *scientia de aspectibus*⁷⁸, that is, optics, or the *scientia de ingeniis*⁷⁹, that is, the 'science of ingeniousness' or engineering. Nevertheless, a comprehensive and persuasive scheme of the inter-relations of these sciences and disciplines to each other is missing, and Gundissalinus's explanation is eventually resolved into a list of disciplines rather than into an organic system of knowledge.

This system would be accomplished in the *De divisione philosophiae*. Here, the number of sources used rises noticeably, through references to Avicenna (*Liber de Philosophia prima* and *Logica*), al-Ġazālī (*Metaphysica* and *Logica*), the Brethren of Purity (*Liber introductorius in artem logicae demonstrationis*), Isaac Israeli (*Liber de definitionibus*), al-Kindī (*Liber de quinque essentiis*), as well as Cicero (*De inventione*), Bede (*Ars metrica*), Boethius, Isidore of Seville, Thierry of Chartres, and William of Conches⁸⁰. The number of the sources used by Gundissalinus corresponds to the purpose of the *De divisione philosophiae*: providing the Latin world with a meta-encyclopaedic system that could allow the introduction of the 'new' sciences in the Latin articulation of knowledge, grounding the latter on the new basis provided by Avicenna's doctrine of *subalternatio*.

The system proposed by Gundissalinus is quite complex, especially in comparison to the articulation of knowledge presented in the *De scientiis*. The

⁷² As we have seen, the *De scientiis* is basically a 'critical translation' of al-Fārābī's *Kitāb Iḥṣā' al-'Ulūm*. Regarding the use of further sources, see the introductory study by Alonso Alonso to his edition of GUNDISSALINUS, *De scientiis*, ed. ALONSO ALONSO, pp. 7-51.

⁷³ GUNDISSALINUS, *De scientiis*, ed. ALONSO ALONSO, pp. 59, 3 - 65, 2.

⁷⁴ *Ibid.*, pp. 67, 3 - 83, 3.

⁷⁵ *Ibid.*, pp. 85, 3 - 112, 6.

⁷⁶ *Ibid.*, pp. 113, 3 - 131, 15.

⁷⁷ *Ibid.*, pp. 133, 3 - 140, 6.

⁷⁸ *Ibid.*, pp. 93, 9 - 99, 4.

⁷⁹ *Ibid.*, pp. 108, 9 - 112, 6.

⁸⁰ On Gundissalinus's sources of the *De divisione philosophiae*, see A. FIDORA, *Die Wissenschaftstheorie des Dominicus Gundissalinus. Voraussetzungen und Konsequenzen des zweiten Anfangs der aristotelischen Philosophie im 12. Jahrhundert*, De Gruyter, Berlin 2003.

first branch of knowledge is eloquence, which correspond to grammar and the civil sciences (*scientiae civiles*), that are poetic and rhetoric. Then, the second branch is the *scientia intermedia*, that is logic or dialectic. Also, logic is structured in several sub-disciplines, corresponding to the Aristotelian writings dedicated to this discipline plus rhetoric and poetics. Finally, the *scientia sapientiae*, that is philosophy, the art of the arts and the discipline of the disciplines (*ars artium et disciplina disciplinarum*). Philosophy is divided in two or better three parts, depending on whether logic is considered a part of philosophy or not: it is the traditional distinction in theoretical and practical philosophy⁸¹. The latter, that is, practical philosophy is composed of politics, economics, and ethics, following the traditional Aristotelian articulation. Theoretical philosophy is divided in three main sciences, that are physics, mathematics, and metaphysics, distinguished by the corporeality and movement of the objects with which they deal.

While the discussion of mathematics is very close to the corresponding part of Gundissalinus's *De scientiis*⁸², the description of physics and metaphysics — a discipline given this name for the first time in the Latin world⁸³ — offers some crucial developments. These are due to Gundissalinus's acceptance of Avicenna's theory of subalternation, presented in the *De divisione philosophiae* through the large quotation of the aforementioned *Summa Avicennae de convenientia et differentia scientiarum*. Indeed, thanks to this theory, Gundissalinus can finally bond together all the disciplines into an organic system of knowledge, of which metaphysics or *scientia divina* is the very root. In fact, all the sciences are subordinated to first philosophy, in what is a first approximation to a doctrine that will spread throughout Europe in a few decades.

Furthermore, Gundissalinus receives and develops another doctrinal point of Avicenna's theory, with a very practical purpose: the distinction between parts of a science — i.e., its internal developments — and its subordinate disciplines. Upon this Gundissalinus can indeed integrate into his system of knowledge also border-line disciplines, arrived through the Arabic-into-Latin translation movement, as subordinated disciplines which are based on but are not parts of a given science.

⁸¹ Regarding this point, see HUGONNARD-ROCHE, *La classification des sciences de Gundissalinus* cit.

⁸² In the *De divisione*, as in the *De scientiis*, mathematic counts seven sciences, that are: arithmetic, geometry, music, astronomy, which are joined to optics (or *scientia de aspectibus*), the science of weight (*scientia de ponderibus*), and the science of ingeniousness (*scientia de ingenii*).

⁸³ See A. FIDORA, *Dominicus Gundissalinus and the Introduction of Metaphysics into the Latin West*, «The Review of Metaphysics», 66, 2013, pp. 691-712.

The best example of this theoretical gain is displayed by the consideration of natural philosophy. Natural philosophy deals with the body as it is subject to movement, rest, and mutation. This science is composed of eight parts, each one of them is defined by a book or part of a book of Aristotle (or pseudo-Aristotle): *Liber de naturali auditu*, *Liber caeli et mundi*, *De generatione et corruptione*, the first three books of the *De impressionibus superioribus* (i.e., *Metheora*), the fourth book of the *Metheora*, *De mineralibus*, *De vegetabilibus* (or *De plantis*), and finally, as for the eighth part of natural philosophy, it is described in *De animalibus*, *De anima* and the remaining Aristotelian books on physics⁸⁴.

At the same time, while physics is developed in itself through these eight parts, it also contains below itself eight subordinated disciplines, and they are: medicine, the science of signs (*de indiciis*), necromancy, agriculture, science of images (*de imaginibus*), navigation, science of mirrors (*de speculis*) and alchemy⁸⁵. These sciences are not parts of natural philosophy, but are subordinated to physics, that is, their object of study is provided by physics. Unfortunately, Gundissalinus is extremely meagre in presenting these eight subordinated sciences, and some of them are just named and not discussed, as it is the case of the science of signs, the science of images, and necromancy. As for alchemy, which appears here for the first time as a recognised scientific discipline, Gundissalinus simply states that it is the science of the conversion of things into other species (*scientia de conversione rerum in alias species*)⁸⁶.

What is crucial to notice is how these sciences, and peculiar disciplines such as necromancy, alchemy, astrology, or the 'science of signs', can be counted among the natural disciplines *without* being part of natural philosophy itself. In this way, any question regarding their lawfulness or rightfulness becomes secondary: Gundissalinus, here, is not trying to justify these disciplines as parts of physics. He is opening an 'epistemological space' on which these new disciplines, derived from the translation movement, could be inserted

⁸⁴ GUNDISSALINUS, *De divisione philosophiae*, ed. BAUR, pp. 20, 20 - 23, 15.

⁸⁵ *Ibid.*, p. 20, 11-19: « Sed quia scientiarum aliae sunt universales, aliae particulares, universales autem dicuntur, sub quibus multae aliae scientiae continentur, tunc scientia naturalis universalis est, quia octo scientiae sub ea continentur: scilicet scientia de medicina, scientia de iudiciis, scientia de nigromantia secundum physicam, scientia de imaginibus, scientia de agricultura, scientia de navigatione, scientia de speculis, scientia de alchimia, quae est scientia de conversione rerum in alias species; et haec octo sunt species naturalis scientiae ». See, in particular, C. BURNETT, *A New Source for Dominicus Gundissalinus's Account of the Science of the Stars?*, « Annals of Science », 47, 1990, pp. 361-374.

⁸⁶ *Ibid.*, p. 20, 18.

and grounded⁸⁷. But this 'epistemological space' would have been impossible to create without Avicenna's theory of subalternation, thanks to which these border-line disciplines can be connected to physics without being themselves parts of physics, with all the epistemological consequences this eventuality would have.

Avicenna's role is both key and pivotal also regarding Gundissalinus's psychological reflection⁸⁸. Gundissalinus's *De anima* deals with the overall discussion on the soul, particularly answering the questions on its existence, ontological status, immortality, and psychological powers: a discussion posited by the Latin tradition of studies on the soul by authors such as Cassiodorus, Alcuin, and pseudo-Augustine⁸⁹. The main difference with the tradition resides in the vast number of new sources upon which Gundissalinus's treatise is based: Qusta ibn Luqa's *De differentia spiritus et animae*, Ibn Gabirol's *Fons vitae*, Avicenna's *De anima*, together with some Latin authors such as Boethius, Macrobius, Cicero, and Augustine, authors that, nonetheless, play a secondary role in the economy of Gundissalinus's text.

By a thematic and comparative point of view, the *De anima* can be divided into two different parts of similar length. The first one, composed of chapters 1-8⁹⁰, is an analysis of the definition, composition, origin, and immortality of the soul, based mainly (but not exclusively) on Ibn Luqa, Avicenna, and Ibn Gabirol. The second part (chapters 9 and 10⁹¹) is centred on the examination of the psychological powers, and relies almost exclusively on Avicenna's *De anima*, while the final pages present a digression on the 'psychology of light'⁹².

In the first place, Gundissalinus demonstrates the existence of the soul through the examination of its relation with the body. The soul is indeed the

⁸⁷ This 'epistemological space' will be closed quite soon, and the fate of many of these sciences will be unhappy: apart from some extremely peculiar thinkers, like Roger Bacon, alchemy and astrology found little or no space in scholastic philosophy, and Bacon himself will be condemned by the Franciscan order in 1278, and his image as a wizard, even furnished with a 'brazen head', will last until Robert Greene and beyond.

⁸⁸ The influence of Avicenna's *De anima* on Gundissalinus's psychology has been analysed by HASSE, *Avicenna's De anima in the Latin West* cit.

⁸⁹ Cf. GUNDISSALINUS, *De divisione philosophiae*, ed. BAUR, p. 15.

⁹⁰ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, pp. 68, 3 - 176, 4.

⁹¹ *Ibid.*, pp. 178, 3 - 318, 11.

⁹² See M. J. SOTO BRUNA, *La lux intelligentiae agentis en el pensamiento de Domingo Gundisalvo*, «Revista española de filosofía medieval», 10, 2003, pp. 335-343.

mover of the body, which moves it while staying put⁹³. As for its definition, the soul is an incorporeal substance moving the body and the perfection of the physical, organic, and potentially living body, as stated by Plato (the former) and Aristotle (the latter).

The soul is an incorporeal simple substance, and nonetheless, it is a compound of matter and form. Every created being is made of the two hylomorphic compounds, including the angelic creatures and the souls, as Gundissalinus demonstrates through the quotation of many of Ibn Gabirol's proofs from the third book of the *Fons vitae*⁹⁴. Nonetheless, even if the soul is composed of matter and form, this does not entail its complexity. Indeed, the soul can be said to be simple in comparison to what follow it in the causative progression of the world⁹⁵.

The souls are created *cotidie*: if they had been created at the beginning of time, the souls would have been useless without a body to which be joined⁹⁶. On the contrary, the souls are created daily, *ex nihilo*, and in causative process of many souls that do not derive from a single, original soul (against traducianism). Nevertheless, the souls are not created directly by God: it is a mediate creation, performed by the angelic creatures⁹⁷. Even though there are three kind of souls – vegetative, sensitive, and rational – there is one soul only in every living being: indeed, the superior always acts upon the inferior⁹⁸.

Furthermore, the soul is immortal. The body is not the efficient cause of the soul, on the contrary, the body is its accidental cause, and thus, when the body dies, its corruption does not affect the soul in any way⁹⁹. The soul does not depend on body – nor the body depends on the soul – and, for this reason, since 'esse enim animae pendet ex aliis principiis quae non permutantur neque

⁹³ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, pp. 68, 1 - 82, 14.

⁹⁴ Cf. *ibid.*, pp. 142, 1 - 164, 22.

⁹⁵ *Ibid.*, pp. 162, 20 - 164, 1: «Non sunt ergo simplices substantiae immunes ab omni compositione; ac per hoc non dicuntur simplices esse quod omni compositione careant, sed quia respectu inferiorum de compositione minus habent, quoniam adhaerentes aeternitati et affixae desiderio uni et eidem creatoris voluntati incommutabili, nulli permutationi subiacent, affectionem non variant, in eodem statu semper permanent».

⁹⁶ *Ibid.*, pp. 124, 3 - 128, 16.

⁹⁷ *Ibid.*, p. 132, 14-18: «Idem ad recipiendum aliquid ab aliquo, nihil est dignius eo quod illud recipit nullo medi ante. Si igitur anima recipit esse a primo factore nullo mediante, tunc nihil est dignius ea ad recipiendum illud ab illo; sed substantia intelligentiae dignior est ad hoc; ergo anima non recipit esse a primo factore nullo mediante».

⁹⁸ *Ibid.*, pp. 108, 1 - 122, 4.

⁹⁹ *Ibid.*, pp. 168, 3 - 170, 7.

destruuntur... anima non moritur in morte corporis'¹⁰⁰. Finally, since there is no possible way by which the soul can be destroyed, one has to admit that the soul is immortal¹⁰¹.

There is no need to stress how crucial is the role played by Avicenna's *De anima* in the first part of Gundissalinus's homonymous writing. It will be sufficient to recall that the resolution of the problem of the internal multiplicity or unity of the vegetative, sensitive, and rational soul¹⁰² (joined to Ibn Gabirol's Neoplatonic causal doctrine)¹⁰³; the demonstration of the difference between soul and body through the argument of the 'flying man'¹⁰⁴; the discussion of the kind of movements of the soul¹⁰⁵; the answer to the problem of the creation of the soul *ab initio mundi* or *cotidie*¹⁰⁶; and the overall discussion on the immortality of the soul¹⁰⁷, are all grounded on Avicenna's discussion presented in his *De anima*. In Gundissalinus's psychological treatise, too, one can see at work the theoretical merging between Avicenna's and Ibn Gabirol's perspective: an unlikely doctrinal fusion that is one of the most characteristic feature of Gundissalinus's reflection.

The role played by Avicenna in Gundissalinus's *De anima* is even more central in the second part of the treatise. In these closing chapters, Gundissalinus expounds the articulation of the vegetative soul¹⁰⁸, and that of the sensitive faculties into *vis motiva* and *vis apprehensiva*, the latter articulated into the external and internal faculties, that are, on the one hand, the five senses¹⁰⁹ and, on the other hand, the five *vires*: *phantasia*, *imaginatio*, *imaginativa/cogitativa*, *aestimativa*, and *memoria*, discussed addressing a series of problems derived, again, from Avicenna's homonymous work¹¹⁰.

¹⁰⁰ *Ibid.*, p. 172, 2-4.

¹⁰¹ *Ibid.*, pp. 172, 5 - 176, 4. One should notice that the structure of this argument is mirrored by (or mirrors) the *De immortalitate animae*. This is not the place where one can discuss the many problems regarding the authorship of this treatise. Nonetheless, the question about who did write the *De immortalitate* needs to be reassessed considering the new data on Gundissalinus and its sources recently made available.

¹⁰² AVICENNA, *Liber de anima*, ed. VAN RIET, V, pp. 105-112.

¹⁰³ IBN GABIROL, *Fons vitae*, ed. BAUMKER, p. 186, 19-23.

¹⁰⁴ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, p. 86, 1-17. See also AVICENNA, *Liber de anima*, I, ed. VAN RIET, pp. 36-37.

¹⁰⁵ *Ibid.*, I, pp. 45-46.

¹⁰⁶ *Ibid.*, V, pp. 115-116.

¹⁰⁷ *Ibid.*, V, pp. 117-124.

¹⁰⁸ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, pp. 186, 12 - 190, 12.

¹⁰⁹ *Ibid.*, pp. 192, 21 - 202, 10.

¹¹⁰ *Ibid.*, pp. 202, 12 - 246, 24.

Then, Gundissalinus passes to the examination of the intellectual process offered by Avicenna's *De anima*. The focus, then, is on the psychological faculties proper to man, 'agere actiones electione deliberationis et advenire artes meditando et comprehendere universalialia'¹¹¹. The intellectual faculties are two: the *virtus activa*¹¹² and the *virtus contemplativa*¹¹³. These two kinds of intellect are directed downwards and upwards and, thus, they produce two different kinds of knowledge correlated to each other: «sed ex eo quod est infra eam — scilicet intellectu activo — generatur mores et scientiae, et ex eo quod est supra eam — scilicet intellectu contemplativo — acquiruntur sapientiae»¹¹⁴.

Gundissalinus's attention is centred on the examination of the progressive actualization of the contemplative intellect through its states of *intellectus materialis*, *in habitu*, and *intellectus adeptus ab alio*¹¹⁵. The Toledan philosopher, in this way, is the first Latin philosopher in presenting and discussing Avicenna's theory of the separate active intellect, from which the *intellectus adeptus* receives its actualisation:

«Qui ideo vocatur intellectus adeptus ab alio quoniam intellectus in potentia non exit ad effectum nisi per intellectum qui semper est in effectum. Aliquid igitur est per quod animae nostrae in rebus intelligibilibus exeunt de potentia ad effectum. Id autem non est nisi intelligentia in effectum, penes quam sunt principia formarum intelligibilium abstractarum. Unde cum intellectus qui est in potentia coniungitur cum illo intellectu qui est in actu aliquo modo coniunctionis, imprimitur in eo aliqua species formarum quae est adepta ab extrinsecus»¹¹⁶.

It is through this intellect *qui semper est in effectum* that the *intellectus adeptus* can receive the principles of the abstract intellectual forms, and it joins the intellect still in potency impressing upon it the intelligible forms from the consideration of what is inferior¹¹⁷. Gundissalinus also accepts the separateness of the active

¹¹¹ *Ibid.*, p. 248, 5-6.

¹¹² *Ibid.*, p. 250, 7-11: «Sed virtus activa sive intellectus activus est principium movens corpus hominis ad singulas actiones quas praecipue sibi eligit secundum quod intendit. Sed hoc facit aliquando per virtutem animalem appetitivam sive desiderativam, aliquando per imaginativam sive aestimativam, aliquando per se ipsam».

¹¹³ *Ibid.*, p. 252, 1-2: «virtus autem contemplativa sive intellectus contemplativus est qui solet informari a forma universali nudata a materia».

¹¹⁴ *Ibid.*, p. 258, 1-3.

¹¹⁵ Regarding the use Gundissalinus makes of Avicenna on this point, see HASSE, *Avicenna's De anima in the Latin West* cit., p. 191.

¹¹⁶ GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, p. 262, 1-9.

¹¹⁷ *Ibid.*, p. 288, 7-11: «Quae forma est intellectus adeptus verissime et haec virtus est intellectus in effectum secundum quod est perfectio. Formatio vero imaginabilium est respectio animae ad thesauros sensibilium. Sed primum est inspicere quod est superius; hoc autem est inspicere quod est inferius».

intellect, and this is made clear by the textual analysis of the *De anima*, where the Toledan philosopher states that:

« Cum autem anima liberabitur a corpore et ab accidentibus corporis, tunc poterit coniungi intelligentiae agenti et tunc inveniet in ea pulchritudinem intelligibilem et delectationem perennem sicut dicemus suo loco »¹¹⁸.

Following Avicenna, this separate intelligence is an angelic creature, as Gundissalinus claims a few pages earlier:

« Sicut ergo corpus humanum non recipit actionem aliquam animae rationalis nisi mediante spiritu, sic et anima rationalis non recipit actionem factoris primi nisi mediante intelligentia, scilicet angelica creatura »¹¹⁹.

The central role played by Avicenna in the overall discussion of Gundissalinus's *De anima*, thus, is striking. Gundissalinus builds his thematisation of the soul on Avicenna's work, shortening, simplifying, and sometimes amending the original discussion of the original *De anima*. Nonetheless, the final pages of Gundissalinus's writing¹²⁰ display a peculiar attitude of the Toledan philosopher. The closing part of the *De anima*, indeed, is marked by the disappearance of any Arabic source, replaced by a constant reference to the Biblical authority. In just a few pages he makes eighteen explicit references to the Bible, in a total of twenty-one references presented throughout the whole text of the *De anima*. The focus is here centred on the discussion of the metaphor of light, in accordance with Augustine's theory of intellectual illumination.

One of the outcomes of this attitude is that, in these pages, Gundissalinus becomes inconsistent in referring to the human intellect¹²¹. The term *intelligentia* is now used in a rather different sense than the active intelligence: it is the highest faculty of the human being, through which one has *sapientia* — and therefore an immanent faculty rather than a separate principle. For instance, Gundissalinus states that:

¹¹⁸ *Ibid.*, p. 288, 11-14.

¹¹⁹ *Ibid.*, p. 136, 9-12.

¹²⁰ *Ibid.*, pp. 302, 6 - 318, 11.

¹²¹ On the introduction of this and further terms related to the intellectual process into the Latin philosophical tradition, see J. JOLIVET, *Intellect et intelligence. Note sur la tradition arabo-latine des XII^e et XIII^e siècles*, in S. HOSSEIN NASR ed., *Mélanges offerts à Henry Corbin*, McGill University - Institute of Islamic Studies, Tehran 1977, pp. 221-237.

«Cum enim hic oculus animae qui est intelligentia in contemplationem creatoris intendit, quoniam Deus lux est, ipsa intelligentia tanta claritate divini luminis perfunditur ut in ipsa intelligentia sic irradiata lux inaccessibilis tamquam forma in speculo resultare videatur»¹²².

Gundissalinus refers with the same term to two different things, an immanent faculty and a transcendent being. And, at the very same time, the final pages of the *De anima* appear to be in contradiction with what Gundissalinus claimed in his previous discussion, for the explicit references to Augustine's theories and the overall change of perspective presented.

Nonetheless, the reason of this change of attitude can be explained perhaps by a simple consideration. Until the final pages of his *De anima*, Gundissalinus has claimed at least three main doctrines in clear disagreement with the Latin Christian tradition: psychological hylomorphism, the angelic creation of the soul, and the existence of a separate medium of human intellection. With the passage to the discussion of what the soul knows after the death of the body, Gundissalinus possibly felt a need to ease the border-line positions he has taken. By this point of view, the references to Augustine seem to be aimed at stating the implicit consistency between what Gundissalinus has claimed following Avicenna, and the Latin tradition: a feature characteristic of Gundissalinus's approach, as underlined by Alexander Fidora regarding Boethius's and Isidore's role in the *De divisione philosophiae*¹²³.

SOME CONCLUSIONS

Avicenna plays a central role in Gundissalinus's philosophical production, as well in his activity as translator. Gundissalinus probably moved to Toledo to participate to the very translation of the Avicennian *corpus* proposed by Ibn Daud. In the following decades, while translating these texts, he would gradually discover Avicenna's doctrines, and this encounter was to be pivotal for his own philosophical reflections.

While pervasive, Avicenna's influence on Gundissalinus's original writings is not balanced or equal. On the contrary, the analysis of Gundissalinus's

¹²² GUNDISSALINUS, *De anima*, ed. ALONSO DEL REAL, p. 304, 1-4.

¹²³ See A. FIDORA, *La recepción de San Isidoro de Sevilla por Domingo Gundisalvo (ca. 1110-1181): Astronomía, Astrología y Medicina en la Edad Media*, «Estudios eclesiásticos», 75, 2000, pp. 663-677; ID., *La metodología de las ciencias según Boecio: su recepción en las obras y traducciones de Domingo Gundisalvo*, «Revista española de filosofía medieval», 7, 2000, pp. 127-136; and ID., *Domingo Gundisalvo y la Sagrada Escritura*, «Estudios eclesiásticos», 76, 2001, pp. 243-258.

philosophical production displays a clear progression on his adhesion to Avicenna, whose doctrines appear to play a secondary role in the *De unitate et uno* and, in a different way, in the *De scientiis*. The second phase of Gundissalinus's speculative activity is then marked by a diffusive presence of Avicenna — both his texts and doctrines — with a crucial role in the *De anima*, *De divisione philosophiae*, and *De processione mundi*.

Avicenna is the answer to the problems arising from Gundissalinus's precocious adhesion to Ibn Gabirol's ontology and cosmology. Possibly through Ibn Daud's criticism, Gundissalinus gradually understands that some doctrines derived by the *Fons vitae* entail problematic outcomes that needed to be resolved. The solution Gundissalinus provides to these doctrinal problems is the assimilation of Avicenna's modal ontology, and the attempt he makes at merging this theory with universal hylomorphism.

A similar scenario is offered by the consideration of the *De divisione philosophiae* and *De anima*. In his epistemological work, Gundissalinus uses Avicenna to substantiate an organic and consistent system of knowledge grounded on the theory of *subalternatio*. Gundissalinus's system is an articulation of sciences in which the new disciplines derived by the translation movement could be finally inserted, with a substantial change of perspective in comparison, for instance, with Hugh of St Victor's *Didascalicon*. In a similar fashion, the *De anima* offers a discussion of the soul, and especially of its powers, that, derived by Avicenna, would have a crucial history of the effects in the thirteenth-century debate and whose first Latin reception was made by Gundissalinus.

Since the impact of Avicenna on Gundissalinus's speculation is so profound and wide, should we refer to the Toledan philosopher as an Avicennist thinker? This is what Albert the Great does in his *De homine*, regarding Gundissalinus's (and al-Ġazālī's) positions¹²⁴. Many decades have passed since the controversy between Étienne Gilson and Roland De Vaux on the supposed *augustinisme avicennisant* or Latin Avicennism of Gundissalinus¹²⁵. While Gilson's position has

¹²⁴ ALBERTUS MAGNUS, *De homine*, ed. H. ANZULEWICZ, Aschendorff, Münster 2008 (Alberti Magni Opera Omnia, XXVII/2), p. 410, 25-27.

¹²⁵ See É. GILSON, *Pourquoi saint-Thomas a critiqué saint-Augustin*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 1, 1926-1927, pp. 5-129; ID., *Avicenne en Occident au Moyen Âge*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 44, 1969, pp. 89-121; ID., *Les sources gréco-arabes de l'augustinisme avicennisant*, « Archives d'Histoire Doctrinale et Littéraire du Moyen Âge », 5, 1930, pp. 1-107; and R. DE VAUX, *Notes et texte sur l'avicennisme latin aux confins des XII-XIII siècles*, Vrin, Paris 1934.

been rejected by many scholars with eminent arguments based on the very text of Gundissalinus's *De anima*¹²⁶, and De Vaux's reading of the first Latin reception of Avicenna suffered a precocious criticism¹²⁷, it is undeniable that Gundissalinus, being the very first Latin philosopher in accepting and developing Avicenna's doctrines, is the initiator of a tendency that would be felt strongly throughout the thirteenth century and beyond.

At the same time, though, there are at least three further considerations that have to be done in order to understand the relation between Gundissalinus and Avicenna. In the first place, it should be recalled that Avicenna was read by Gundissalinus (and Ibn Daud) in explicit consistency with Aristotle. This fact is made clear by Gundissalinus's direct references to Aristotle in his philosophical production, under whose name he often quotes excerpts extracted by Avicenna¹²⁸. This attitude — shared by other thinkers in different traditions, such as Maimonides¹²⁹ — is also explicitly presented by Ibn Daud in the dedicatory letter of the Latin translation of Avicenna's *De anima*, and it would have a discreet success in the following decades of the Latin philosophical speculation, when Avicenna was used as interpretative mediation for a correct understanding of Aristotle's writings, up to the translations of Averroes's works¹³⁰.

A second, fundamental aspect to consider is that Gundissalinus's progressive acceptance of Avicenna's theories does not imply for him a complete abandonment of Ibn Gabirol's ontology, but only its reassessment. Gundissalinus's adherence to doctrines completely unacceptable from an Avicennian point of view, as displayed by Ibn Daud's criticism, makes it hard to claim that Gundissalinus was a convinced Avicennist, as was certainly the case for Ibn Daud.

This point is directly linked to a third point. Gundissalinus's reception of Avicenna is partial: he enacts a sort of 'cherry-picking' upon the Avicennian

¹²⁶ See, in particular, J. JOLIVET, *The Arabic Inheritance*, in P. DRONKE ed., *A History of Twelfth-Century Western Philosophy*, Cambridge University Press, Cambridge 1988, pp. 113-148.

¹²⁷ See E. BERTOLA, *È esistito un avicennismo latino nel Medioevo?*, « Sophia », 35, 1967, pp. 318-334, and 39, 1971, pp. 278-320.

¹²⁸ See POLLONI, *Aristotle in Toledo: Gundissalinus, the Arabs, and Gerard of Cremona's Translations* cit.

¹²⁹ See J. STERN, *The Matter and Form of Maimonides' Guide*, Harvard University Press, Cambridge - London 2013.

¹³⁰ See A. BERTOLACCI, *On the Latin Reception of Avicenna's Metaphysics before Albertus Magnus: An Attempt at Periodization*, in A. BERTOLACCI, D. N. HASSE eds., *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*, De Gruyter, Berlin 2012, pp. 197-223. See also A. BERTOLACCI, *The Reception of Avicenna in Latin Medieval Culture*, in P. ADAMSON ed., *Interpreting Avicenna. Critical Essays*, Cambridge University Press, Cambridge 2013, pp. 242-269.

writings he had at his disposal, choosing only those theories that he felt as relevant and leaving apart a vast amount of correlated doctrinal points he did not perceive as important or, perhaps, he did not even understand. A clear example of this is the silence under which Avicenna's distinction between essence and existence is passed by Gundissalinus. However, it is also of the utmost importance to note the 'hermeneutical violence' that characterises Gundissalinus's attitude toward Avicenna's hylomorphism, completely rejected without presenting, in his original writings, any moment of actual confrontation with Avicenna's positions. This is possibly the most relevant aspect regarding the supposed Avicennism of Gundissalinus. The complete lack of any *dialogue* with Avicenna, also in his later writings, seems to mark Gundissalinus's use of Avicenna as still immature and even ingenuous, especially in comparison to the subsequent Latin reception of Avicenna.

Despite this, Avicenna plays a central, crucial role for Gundissalinus. Even if he is quoted by name only in a quite few occasions, the overall reflection of the Toledan philosopher is grounded on Avicenna's texts, and insolubly bound to them. From this perspective, Avicenna's founding presence is quite symmetrical to the influence his writings have on two further anonymous works written in the same decades as Gundissalinus's: the *De peregrinationibus animae apud inferos*¹³¹, or 'Anonymous d'Alverny', and the *Liber de causis primis et secundis*¹³². A. Bertolacci referred to Gundissalinus and these two writings as witnesses of this first stage of the Latin reception of Avicenna, called '*Philosophia prima without Metaphysica*', stressing the autonomy the references to Avicenna have as regards to Aristotle's *Metaphysics*¹³³.

These writings share a common purpose: they are aimed at facilitating the insertion of new ideas, new authors, and new doctrinal perspectives into a philosophical debate that was still based on the framework furnished by Plato's *Timaeus*, Chartrean natural philosophy and Parisian dialectic. They try to justify the new doctrines from 'the Arabs' displaying their consistency with the Latin tradition, as it is in place with Gundissalinus's use of Boethius, Augustine, and the Chartrean speculation; the *De causis primis et secundis* attempting a synthesis between Avicenna

¹³¹ AN., *De peregrinationibus animae apud inferos*, ed. M.-T. D'ALVERNY, *Les pérégrinations de l'âme dans l'autre monde d'après un anonyme de la fin du XII^e siècle*, « Archives d'histoire doctrinale et littéraire du Moyen Âge », 13, 1940-1942, pp. 280-299.

¹³² AN., *Liber de causis primis et secundis*, ed. DE VAUX, *Notes et teste sur l'avicennisme latin aux confins des XII-XIII siècles cit.*, pp. 83-140.

¹³³ BERTOLACCI, *On the Latin Reception of Avicenna's Metaphysics before Albertus Magnus: An Attempt at Periodization cit.*

and Scotus Eriugena; and the *Peregrinatio*, where the author inserts many Arabic doctrines in a Christian eschatological description of the afterlife.

It is exactly in this pioneering role they are playing that these treatises and authors display their fundamental relevance. Indeed, their perhaps ingenuous approach is caused by their lack of that process of progressive absorption and critical elaboration of the Arabic sources, and they lack all this exactly for they are the pioneers of this philosophical process that would lead, in a few decades, to the mature confrontations with Avicenna of thinkers such as Thomas Aquinas, Albert the Great, or Roger Bacon. It is this that makes of Gundissalinus one of the pivotal figures in the history of Western philosophy, since his curiosity, syncretism and eagerness, contributed crucially to the road that led, philosophically, Avicenna to Paris, where his thought will be duly problematized, developed, and criticised.

ABSTRACT

Gundissalinus and Avicenna : Some Remarks on an Intricate Philosophical Connection

This article analyses the peculiarities of Dominicus Gundissalinus's reading and use of Avicenna's writings in his original works. Gundissalinus (1120ca - post 1190) is indeed the Latin translator of Avicenna's *De anima* and *Liber de philosophia prima*, but also an original philosopher whose writings are precious witnesses of the very first reception of Avicennian philosophy in the Latin West. The article points out the structural bond with the Persian philosopher upon which Gundissalinus grounds his own speculation. This contribution stresses, in particular, the important role played by Avicenna's psychology, epistemology, and metaphysics in order to provide Gundissalinus with a different set of answers to at least two main questions. On the one hand, the problem of creatural existence and cosmological causation, concerning which Gundissalinus tends to doctrinally merge Avicenna with Ibn Gabirol. On the other hand, Avicenna's influence is crucial for Gundissalinus's attempt at elaborating a new system of knowledge, which was supposed to be able to include the new sciences made available by the translation movement, but that also needed to be internally organised through firm epistemological principles. Beside his crucial contribution as translator, Gundissalinus's first philosophical encounter with the Avicenna paved the road for the subsequent reception of the Persian philosopher's works, opening a hermeneutical perspective which would be pivotal for the thirteenth-century discussions on soul, knowledge, and being.

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*On the Persian Translations of Avicenna's Ilāhiyyāt**

I. INTRODUCTION

The present study is intended to give a brief description of the translations from Arabic to Persian of *Ilāhiyyāt* ([Science of] Divine Things) of *Kitāb al-Šifā'* (Book of The Healing) by Ibn Sīnā (Avicenna), with particular reference to the manuscripts that are currently preserved in Iran and India. A complement to the present research will be a systematic survey of other possible *testimonia* of the translations in question, preserved in the geographical areas of the Middle East.

The second objective of the article is to present some hypotheses relating to the manuscripts consulted, mostly dating from the period of the Safavid dynasty (XVI-XVIII c.), an epoch of extraordinary cultural vitality testified to by the large number of comments and glosses on the works of the 'great teachers', as well as by the major circulation of manuscripts in Iran and in the Indo-Pakistan subcontinent¹.

* This paper is part of the ERC research project 'Philosophy on the Border of Civilizations and Intellectual Endeavours: Towards a Critical Edition of the *Metaphysics* (*Ilāhiyyāt of Kitāb al-Šifā'*) of Avicenna (Ibn Sīnā)', Acronym 'PhiBor' (<http://www.avicennaproject.eu>), based at the Scuola Normale Superiore in Pisa. My heartfelt thanks go to Prof. A. Bertolacci, PI of the abovementioned project, for giving me the opportunity to acquire and consult the codices examined and, above all, for his advice, his helpfulness and his constant scientific and human support. I am also deeply grateful to Dr. V. Pallegà de Bustinza, to Dr. G. Dadkhah and Dr. F. Ghassemlou, for their essential collaboration in retrieving the necessary material and for the precious linguistic support they have given me. Particular thanks go to my colleagues in the PhiBor team: T. Alpina, A. Astesiano, S. Di Vincenzo and M. Scermino.

¹ The 'Safavid cultural Renaissance' had its apex in the epoch of 'Abbās I (r. 995-996/1588-1038/1629) and was particularly concerned with artistic disciplines, also amply encompassing sciences and philosophy. See H. M. HAMEDANEE, *History of Science in Iran in the last four centuries*, in A. Y. AL-HASSAN, M. AHMED, A. Z. ISKANDAR eds., *Science and Technology in Islam*, vol. IV, part II: Technology and Applied Sciences, Unesco Publishing, Beirut 2001, pp. 615-643; H. NASR, *Spiritual movements, Philosophy and Theology in the Safavid period*, in P. JACKSON, L. LOCKHART eds., *The Cambridge History of Iran*, vol. VI, The Timurid and Safavid Periods, Cambridge University Press, Cambridge 1968-1991, pp. 656-697; C. MELVILLE ed., *Safavid Persia: The History and Politics of an Islamic Society*, vol. IV, Pembroke Persian Papers, I. B. Tauris, London - New York 1996; A. J. NEWMAN, *Safavid Iran. Rebirth of a Persian Empire*, I. B. Tauris, London - New York 2009; R. POURJAVADY, *Philosophy in Early Safavid Period: Najm al-Dīn Maḥmūd al-Nayrīzī and His Writings*, Brill, Leiden - Boston 2011; ID., S. SCHMIDTKE, *An Eastern Renaissance? Greek Philosophy under the Safavids (16th-18th centuries AD)*, « Intellectual History of the Islamicate World », 3, 2015, pp. 248-290; S. RIZVI, *Isfahan School of Philosophy*, in *Encyclopædia Iranica*, <http://www.iranicaonline.org/articles/isfahan-school-of-philosophy>; M. TERRIER, *La représentation de la sagesse grecque comme discours et mode de vie chez les philosophes šī'ites de l'Iran safavide (XI^e/XVII^e siècle)*, « Studia graeco-arabica », 5, 2015, pp. 299-320.

The translations from Arabic to Persian of the *Metaphysics* section of *Šifā'*, which will be the object of the present study, are set precisely in the variegated context of the Safavid epoch.

II. MANUSCRIPTS OF THE PERSIAN TRANSLATIONS OF *İLĀHIYYĀT*

Excluding codices belonging to private collections, which are difficult to access, and some attested manuscripts still being investigated, it has been possible to identify eight copies of translations into Persian of the *Metaphysics* of *Šifā'*. Firstly the general and individual catalogues of the Iranian and Indian libraries (hereafter abbreviated as D, DA₁, F, H, K, MZ, O, S) were consulted²,

² Abbreviations:

D = ms. recorded in M. DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena)* (The Abridged Catalogue of Iran Manuscripts), Al-Javad Cultural & Research Institute, Tehran 1389HŠ/2010, vol. II, p. 133, vol. VI, pp. 1202-1203.

DA₁ = ms. recorded in M. T. DĀNIŠPAZŪH, *Fihrist-i kitābkhānah-i Ihdā'ī-yi Āqā-yi Sayyid Muḥammad-i Mishkāṭ, Kitābkhānah-i Dānišgāh-i Tehrān* (Catalogue méthodique, descriptif et raisonné des manuscrits philosophiques, mystiques et apologétiques persans et arabes de la Bibliothèque de l'Université de Téhéran [Don de M. le Professeur Meshkāṭ]), Imprimerie de l'Université, Tehran 1332HŠ/1953, vol. III, 1, pp. 199-200.

DA₂ = ms. recorded in Id. ed., 'Introduction', in IBN SĪNĀ, *Al-Nağāt min al-ğarq fī baḥr al-ḍalālāt, Intiṣārāt-i Dānišgāh-i Tehrān*, Tehran 1364HŠ/1985, p. 95.

ES = ms. recorded in M. J. ESMAEILI, *The Commentary Tradition on the Ilāhiyyāt of the Shifā'*. *An Historical and Bibliographical Survey*, « Sophia Perennis. The Quarterly Journal of Sapiential Wisdom and Philosophy », The Iranian Institute of Philosophy with the Collaboration of the Iranian Philosophical Society, vol. X, n. 2, Autumn and Winter 2013-2014, Serial Number 24, pp. 5-26.

F = ms. recorded in M. DIRĀYATĪ, *Fehrestgān-e Noskhe-ha-ye Khattī-ye Iran (Fankha)* (Union Catalogue of Iran Manuscripts), Cultural & Research Institute of Al-Javad, vol. IV, Tehran 1391HŠ/2012, pp. 785-786, vol. XXI, Tehran 1392HŠ/2013, pp. 79-80.

H = ms. recorded in A. ḤĀ'IRĪ, *Fihrist-i kitābkhānah-i Majlis-i Shūrā-yi Millī* (A Catalogue of the Manuscripts in the Parliament Library [Persian & Arabic]), Intiṣārāt-i Mağlis, Tehran 1345HŠ/1965, vol. V, pp. 297-299, 402-404.

IS = ms. recorded in H. N. ISFAHĀNĪ ed., 'Introduction', in IBN SĪNĀ, *Ibn-i Sīnā Kitāb al-Shifā' (Metaphysics) with Marginal Notes by Mullā Sadrā, Mīrdāmād, Khunsarī, Sabzavārī and others*. Edited with Introduction and Notes by H. N. Isfahānī Ph.D., Society for the Appreciation of Cultural Works and Dignitaries, Institute of Islamic Studies Tehran, McGill Universities, Tehran 1383HŠ/2004, pp. 58-59, 83-84, 100-101, 128.

K = ms. recorded in T. Ḥ. KANTŪRĪ, *Fihrist-i kutub-i 'arabī wa fārsī wa urdū maḥzūnah-i Kutubhānah-i Āṣafiyah-i Sarkār-i Ālī* (Catalogue of the Arabic, Persian and Urdu books and manuscripts in the Āṣafiyah Library), Dār al-ṭab' Sarkār-i Ālī, Hyderabad 1347H/1928, vol. III, pp. 492-493.

MA = ms. recorded in Y. MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannafāt-i Ibn-i Sīnā, Bibliographie d'Ibn Sīnā, Intiṣārāt-i Dānišgāh-i Tehrān*, Tehran 1333HŠ/1954, p. 174.

MZ = ms. recorded in A. MUNZAVĪ, *Fehrestvāra-ye Ketābhā-ye Fārsī* (An Annotated Bibliography of Persian Works Including Manuscript's Descriptions), The Centre of Great Islamic Encyclopaedia Library Publications Series, Tehran 1381HŠ/2002, vol. VI, Philosophy & Ethics, pp. 104-105.

for the purpose of locating the manuscripts of interest to us. Subsequently an analysis was carried out of the reference scientific literature relating to these codices, some of which are reported by M. T. Dānišpāzūh, M. J. Esmaeili, N. Iṣfahānī and Y. Mahdavi (see note 2 and Appendix).

The secondary literature revealed the existence of three separate Persian translations of Avicenna's *Metaphysics*. The research carried out by us seems to suggest, though still hypothetically, the need to make some changes to this interpretative paradigm.

The table that follows gives a summary of the witnesses identified and so far known, but these are being scrupulously and carefully evaluated. The data given derive from a first comparative study of the copies in our possession and are classified according to chronology, presumed authors of the translations and corresponding part of *Metaphysics* translated. The last two columns provide additional information on the reference bibliographical sources and on the place where the copy was made, the date of the translation or copy and the name of the copyist, if these are known³.

MANUSCRIPT	TRANSLATOR (indicated in the ms.)	TRANSLATOR (indicated in the bibliogra- phy)	CONTENT	PLACE, DATE, COPYIST	BIBLIOGRAPHI- CAL SOURCES
1) Ms. 1138* R a m p u r (India), Raza Library, ff. 498	'Alī Riḍā Ṭarza'ī ibn M a w l ā n ā Šams al-Dīn Ḥalḥālī	M a w l ā n ā 'Alī Riḍā al- Ṭarza'ī ibn Šams al-Dīn al-Ḥalḥālī	P e r s i a n translation + commentary of <i>Ilāhiyyāt</i> incorporating the Arabic text	K a b u l 1048H/1638- 9 (place and date of translation ; unknown date of copy)	S : 313

O = ms. recorded in *Handbook of Andra Pradesh Government Oriental Manuscripts Library and Research Institute*, Osmania University Campus Hyderabad. Persian, Urdu, Arabic Books, vol. II, p. 85.

S = ms. recorded in W. H. SIDDIQI, *Fihrist-i nushahā-yi fārsī-yi kitābkhānah-i Raḍā, Rampur* (Catalogue of Persian Manuscripts of Rampur Raza Library), Diamond Printers, Delhi 1375HŠ/1996, vol. I, p. 313.

Reference websites : www.aghazozorg.ir; www.ical.ir; www.nlai.ir.

³ The list of the manuscripts is in chronological order. Copies marked with * were acquired. Other copies on microfilm and in paper form, kept at some Iranian libraries, are identified in D and F : Tehran, Dānišgā Library, ms. 2300; Tehran, Dānišgā Library, ms. 2303; Qum, Mar'ašī, ms. 1505. See DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena)* cit., vol. VI, p. 1202 and ID., *Fehrestgān-e Noskhe-ha-ye Khatti-ye Iran (Fankha)* cit., vol. IV, pp. 785-786. D and F probably refer to the oldest data published by H and DA, the authors of the respective catalogues of the Mağlis Library and the Miškāt collection of the University of Tehran. See Appendix : Bibliographical Sources.

2) Ms. 431 Hyderabad (India), Āṣaḥfiyya Library		‘Alī Riḍā al- Ṭarza’ī (ibn Mawlānā Šams al-Dīn Ḥalḥālī)	Persian translation of <i>Ilāhiyyāt</i>		DA ₂ : 95 ^a ; ES: 8 ^b ; IS: 100 ^c ; K: 492-493; O: 85
3) Ms. 7 Tabriz (Iran), Ṭiqat al- Islām Library now in unidentified private collection ^d		‘Alī ibn Muḥammad Ḥusaynī ‘Arīḍī (D) ‘Alī ‘Arīḍī Siyyāhānī (DA ₂) ‘Alī ibn Muḥammad Ḥusaynī ‘Arīḍī (F)	Persian translation of <i>Ilāhiyyāt</i> ; Persian translation of <i>Šifā’</i> (D)	D dates ms. 7 to 1078H/1667-8 DA ₂ dates it to 1087H/1676-7	D, VI: 1202 ^e ; DA ₂ : 95; F: IV: 785 ^f

^a DĀNİŞPAZŪH, ‘Introduction’ cit., p. 95, presents two translations: the first one attributed to ‘Alī Riḍā Ṭarza’ī ibn Šams al-Dīn Ḥalḥānī and relating to ms. 2; the second one, by ‘Alī ‘Urayḍī Siyyāhānī, corresponding to copies 3, 4, 6 and 7. Dānišpazūh gives the last part of the name of the author as Ḥalḥānī, instead of Ḥalḥālī. The city of Khalkhal is in north-western Iran, in Ardabil province.

^b ESMAEILI, *The Commentary Tradition on the Ilāhiyyāt of the Šifā’* cit., p. 20, lists three translations, respectively by the following: «A) ‘Alī ‘Urayḍī Imāmī of Isfahan, a student of Āqā Ḥusayn Khwānsārī (d. 1098 AH); B) ‘Alī Riḍā Ṭarza’ī; C) Mirzā Ḥusayn ‘Alī, better known as Muḥaqqiq-i Khalkhālī, a student of Mirzā Abū al-Ḥasan Jilwah (1201-1275 AH solar)». Esmaeili therefore distinguishes Ṭarza’ī from Ḥalḥālī, considering them two different authors. With respect to the third author, Esmaeili in note 10 on p. 20 gives the following bibliographical reference: F. ARDEBİLĪ, *Tārikh-i Ardebil wa Dāneshmandān*, vol. I (Mashhad, n.p., 1357 AH solar), p. 201.

^c IŞFAHĀNĪ, ‘Introduction’ cit., p. 100, presents two Persian translations of *Metaphysics*: a first one, for which he gives no numerical references, with al-Sayyid ‘Alī al-‘Urayḍī al-Imāmī as author A); a second one, attributed to author B) ‘Alī Riḍā al-Ṭarza’ī’, with respect to copy 2.

^d Info provided by Dr. Aḥmad Ḥosseini (University of Tabriz).

^e DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena)* cit., VI, attributes the translation of *Šifā’* to ‘Alī ibn Muḥammad Ḥusaynī ‘Urayḍī (XI/XVII c.), as concerns mss. 3 and 5.

^f ID., *Fehrestgān-e Noskhe-ha-ye Khattī-ye Iran (Fankha)* cit., IV, pp. 785-786, identifies copies 3, 4, 5 and 6 as belonging to the same translation of *Metaphysics*, ascribed to ‘Alī ibn Muḥammad Ḥusaynī ‘Arīḍī (XI/XVII c.).

4) Ms. 251* Tehran (Iran), Dānišgāh Library (<i>Miškāt</i> collection), ff. 390	<p>‘Alī ibn Muḥammad Ḥuṣaynī ‘Arīdī (D)</p> <p>‘Alī ‘Arīdī Siyyāhānī (D_{A1})</p> <p>Sayyid ‘Alī ibn Muḥammad ibn Asad Allāh Imāmī ‘Uraydī Sipāhānī (D_{A2})</p> <p>‘Alī ‘Urayqī Imāmī of Isfahan (ES)</p> <p>Alī ibn Muḥammad Ḥuṣaynī ‘Arīdī (F)</p> <p>Anonymous (MA : 174)</p>	Persian translation + commentary of <i>Ilāhiyyāt</i> I - I X . 3 , incorporating the Arabic text	Isfahan 1084H/1673-4 (date of copy) ‘Abd al-Ḥāḥir ibn al-Ma‘šūm (‘Abd al-Ḥāḥir ibn al-Ma‘šūm Karahrūdī ?) ^g	D, II : 133 ^h ; DA ₁ : 199-200 ⁱ ; DA ₂ : 95 ; ES : 8 ; F, IV : 785 ; MA : 174
5) Ms. 9081* Tehran (Iran), Dānišgāh Library, ff. 410	<p>‘Alī ibn Muḥammad Ḥuṣaynī ‘Arīdī (D)</p> <p>Alī ibn Muḥammad Ḥuṣaynī ‘Arīdī (F)</p>	Persian translation + commentary of <i>Ilāhiyyāt</i> I - I X . 3 , incorporating the Arabic text (Persian translation of <i>Šifā</i> in D)	1087H/1676-7 (date of copy) Muḥammad Ma‘šūm ibn Muḥammad Bāqir	D, VI : 1202 ; F, IV : 785

^g Cf. ‘Abd al-Ḥāḥir ibn al-Ma‘šūm Karahrūdī (or Garmrūdī) : copyist of *Ilāhiyyāt*, ms. Hoy, Madrasa-i Namāzī 623 (XI/XVII). It contains : *Ilāhiyyāt* I.2-X.5. See <http://www.avicennaproject.eu/index.php?id=57>.

^h DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena)* cit., II, p. 133, refers to ms. 4 as a translation of the *Metaphysics* section. Id., VI, pp. 1202-1203, lists mss. 6 and 7 among the witnesses of a different anonymous translation than ms. 4.

ⁱ DĀNIŠPĀZŪH, *Fihrist-i kitābkhānah-i Iḥdā’i-yi Āqā-yi Sayyid Muḥammad-i Mishkāt* cit., pp. 199-200, refers to a Persian translation of the *Ilāhiyyāt*, ms. 4, attributed to Sayyid ‘Alī ibn Muḥammad ibn Āsad Allāh Imāmī ‘Uraydī Sipāhānī. MAHDAVĪ, *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā* cit., p. 174, instead records copy 4 as a witness of an anonymous translation of *Metaphysics*.

6) Ms. 1912* T e h r a n (Iran), Mağlis Library, pp. 790		‘Alī ‘Arīdī S i y y ā h ā n ī (D A ₂) ‘Alī ‘Urayqī Imāmī of Isfahan (ES) Alī ibn Muḥammad Ḥ u s a y n ī ‘Arīdī (F) Anonymous in D, H	P e r s i a n translation + commentary of <i>Ilāhiyyāt</i> I - I X . 3 , incorporating the Arabic text ; P e r s i a n translation + commentary of <i>Šifā</i> (D)	12th/18th c. (date of copy)	D, VI : 1 2 0 2 - 1 2 0 3 ^j ; DA ₂ : 95 ; ES : 8 ; F, IV : 785- 786 ; H : 4 0 2 - 4 0 4
7) Ms. 1 8 4 0 / 2 * T e h r a n (Iran), Mağlis Library, pp. 179-387		‘Alī ‘Arīdī S i y y ā h ā n ī (D A ₂) ‘Alī ‘Urayqī Imāmī of Isfahan (ES) Anonymous in D, F, H	P e r s i a n translation + commentary of <i>Ilāhiyyāt</i> I.4 - VIII.7 ; P e r s i a n translation + commentary of <i>Šifā</i> (D)	‘Abd al-Karīm ibn Hādī al- Qazvīnī ? 1318H/1900-1 (date of copy) ^k	D, VI : 1203 ; DA ₂ : 95 ; ES : 8 ; F, XXI : 80 ^l ; H : 297-299, 404
8) Ms. 20348- 5* T e h r a n (Iran), Millī Library, ff. 565	‘Alī Sayyid ‘Alī al- Ḥusaynī al- ‘Urayqī al- I m ā m ī		P e r s i a n translation of <i>Ilāhiyyāt</i> & <i>Išārāt</i>		www.nlai. ir ^m

^j DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena)* cit., VI, pp. 1202-1203, refers to mss. 6 and 7 as a translation of and comment on *Šifā* by an uncertain author.

^k ḤĀ’IRĪ, *Fihrist-i kitābkhānah-i Majlis-i Shūrā-yi Millī* cit., p. 298, gives the name of the scribe, ‘Abd al-Karīm ibn Hādī al-Qazvīnī and the date 1318, which appear in the same code, but in the colophon of the following treatise ms. 1840/3.

^l In DIRĀYATĪ, *Fehrestgān-e Noskhe-ha-ye Khattī-ye Iran (Fankha)* cit., XXI, p. 80, ms. 7 appears as an incomplete translation of *Metaphysics* containing brief comments on other works, including *Nağāt*.

^m At the National Library of Tehran ms. 8 is listed among the translations of *Metaphysics* into Persian. To date, the existing literature makes no mention of it.

III. STATE OF THE ART

As an analysis of the chart shows, the currently existing secondary literature only provides data that partly agree with one another. The divergences suggest the need for an overall reconsideration of the problem of the Persian

translations of *Metaphysics*, through an analysis of the evidence emerging from direct inspection of manuscripts (see below, New Data). For the moment let us concern ourselves with summing up the state of the art according to the present-day bibliography.

D, DA₁, DA₂, ES, F, IS and MZ identify translator A) Sayyid 'Alī (= 'Alī Sayyid 'Alī) ibn Muḥammad ibn Asad Allāh [al-Ḥusaynī] al-'Urayḍī (= 'Arīḍī) [al-]Imāmī [al-]Iṣfahānī (= Siyyāhānī/Sipāhānī).

DA₂, ES, IS, K, O and S present the second translator B) (Mawlānā) 'Alī Riḍā Ṭarza'ī (ibn Šams al-Dīn al-Ḥalḥālī).

Finally, ES reports on a third translator C) Mirzā Ḥusayn 'Alī, Muḥaqqiq-i Ḥalḥālī.

On the basis of the bibliographical data, author A) 'Urayḍī (XI/XVII c.) appears to have almost entirely translated from Arabic to Persian the *Metaphysics* section of *Šifā'*. On the cover page of ms. 4 there is a brief biographical note, probably modern, which identifies the author with Sayyid 'Alī ibn Muḥammad ibn Asad Allāh al-Imāmī al-Iṣfahānī, a hypothetical descendant of 'Alī 'Urayḍī, the son of Imām al-Šādiq⁴. Iṣfahānī is also characterized as a student of Āqā Ḥusayn ibn Muḥammad al-Ḥwānsārī (1016-1099H/1607-1687), one of the great Imamites of the Safavid epoch and also a commentator on the *Metaphysics* section of *Šifā'*⁵. The same note indicates that 'Urayḍī also translated the text of *Iṣārāt* into Persian⁶.

According to the literature data, translator B) 'Alī Riḍā Ṭarza'ī ibn Šams al-Dīn al-Ḥalḥālī would instead be the author of a second, separate Persian

⁴ Ġa'far ibn Muḥammad al-Šādiq (699-700/80H or 702-703/83H – 765/148H), a descendant of 'Alī, was the sixth Twelver Imām.

⁵ Of great significance is the attested Persian translation of *Ilāhiyyāt* by Āqā Ḥusayn ibn Muḥammad al-Ḥwānsārī, of which, however, no proof has yet been found. See D. ŠAFĀ, *Tārīḥ-e adabiyyāt dar Irān*, (A History of Iranian Literature), vol. V, From the beginning of the 10th century to the middle of the 12th century A.H., Part I, Ferdowsi Publication, Tehran 1378HŠ, p. 315. Ḥwānsārī wrote two commentaries upon the *Ilāhiyyāt*: the first one containing a long introduction that is missing in some manuscripts. The second manuscript is *de facto* a response to the critiques by Muḥammad Bāqir Ibn Mu'min Sabzawārī Iṣfahānī (1018-1090H/1609-1680), whose name Ḥwānsārī does not mention, but refers to him as «one of the scholars of the time». In this commentary, Ḥwānsārī severely attacks Sabzawārī. See Ā. Ḥ. ḤWĀNSĀRĪ, *Ḥāshiyatu Ilāhiyyāt al-Shifā'*, ed. Ḥ. N. IṢFAHĀNĪ, Tehran 1999 and <http://www.avicennaproject.eu/index.php?id=65>. In S. H. NASR, M. AMINRAZAVI, *An Anthology of Philosophy in Persia. From the School of Shiraz to the Twentieth Century*, I. B. Tauris Publishers, London - New York 2015, in association with the Institute of Ismaili Studies London, vol. V, p. 283, it is reported that Mullā Raḡab 'Alī Tabrizī (d. 1080H/1669) translated *Šifā'* and *Iṣārāt* from Arabic to Persian, but at the moment we have no further notices on this.

⁶ IṢFAHĀNĪ, 'Introduction' cit., pp. 83, 128, this author is named as Sayyid 'Alī al-'Urayḍī Darab Imāmī (XI/XVII c.). Furthermore, Iṣfahānī gives a list of the manuscript copies of Persian translations of *Ilāhiyyāt* (pp. 100-101) and a forthcoming edition of the translation/commentary is announced, p. 59.

translation, the copies of which have been identified in India. Regarding the third author mentioned C) we have no other notices.

To date it has not been possible to obtain more precise biographical data on authors B) and C) and to establish their identity with any certainty.

IV. NEW DATA

Seeing the conflicting information that appears in the bibliography, as examined in the previous section, a first examination was undertaken of the photographic reproductions of the manuscripts listed in the table, with the exception of 2 and 3, copies of which are not currently available.

In most cases, the exemplars examined date from the 11th-17th centuries. Mss. 1, 4, 5, 6 and 7 present multilevel editing, in which the translator gives the text of *Ilāhiyyāt* in Arabic, overlined with purple ink (mss. 1, 4, 5, 6), and afterwards the translation into Persian and the textual comment. The translation is difficult to understand, sometimes making the text unintelligible.

Mss. 1, 4, 5, 6 and 7 are probably distinct copies of the same translation, though they present some differences in the detail. Among these, the only exemplar that contains an almost complete translation of *Metaphysics* is ms. 1, which only shows a few internal lacunae. With reference to this last manuscript, the colophon clearly attributes the translation to 'Alī Riḍā Ṭarza'ī ibn Mawlānā Šams al-Dīn Ḥalḥālī. This is the oldest witness, produced in Kabul in 1048H/1638-9:

T.1 Ms. 1, *Colophon*:

ترجمه فنّ ثالث عشر کتاب شفاء بعون إفاضات إلهیه و مددکاری ایزد بیچون در کابل در وقت چاشتگاه در تاریخ ششم ربیع الثانی در سنه هزار و چهل و هشت هجریه . و مؤلف این ترجمه مشوّش النظام علی رضا طرزی ابن مولانا شمس الدین خلخالی .

Mss. 4, 5 and 6 seem to contain a partial version of the translation by 'Alī Riḍā Ṭarza'ī: the Arabic text, the translation and the commentary are interrupted at treatise IX.3, followed by the colophons, in some cases containing details on the copyist and the place of copy (see table). Mss. 4, 5 and 6 are also characterized by the presence of an *incipit* and an initial addition absent in 1. Manuscript 7 gives an even shorter translation than 4, 5 and 6, because it only presents a fragmentary portion of *Metaphysics* (from I.4 to VIII.7). It seems to be possible to ascribe the translation to Ṭarza'ī.

The divergences that can be seen in this group of manuscripts could have been caused by the existence of distinct branches of tradition, by accidents of transmission or by deliberate interventions on the text. More in detail, it can be supposed that Iranian copies 4, 5 and 6 represent a branch of an independent tradition: the fact is that the absence of the final section of the translation, which the copies have in common, might be linked to the same copy. On the other hand, ms. 1 would represent a second branch of a tradition, since it shows the omission of an initial section of the translation not shared by 4, 5 and 6. In other words, Ṭarza'ī appears to have almost entirely translated the *Metaphysics* section of *Šifā'* and the copies preserved in Iran and in India would be incomplete through an accident of transmission or for other reasons still to be discovered. At the present stage of the research it is not possible to settle the issue.

After the recent acquisition of manuscript 8, still being examined, the panorama has appeared to be even more ramified: the fact is that this copy is different from all the other witnesses examined. Specifically, the manuscript contains two translations into Persian: one of *Ilāhiyyāt* and afterwards one of *Išārāt*. According to what is stated in the *incipit* of 8, both translations were done by 'Alī Sayyid 'Alī al-Ḥusaynī al-'Uraydī al-Imāmī.

T.2 Ms. 8, *Incipit*:

... برحمت ربّه علی سید علی الحسینی العریضی الإمامی که غرض ازین ترجمه
کتاب إلهی شفاء ...

At this point it is important to remember that the name of 'Uraydī appeared in the secondary literature on the Persian translations of *Metaphysics* as the author of the versions contained in 3, 4, 5, 6 and 7. However, as we have seen, mss. 5, 6 and 7 seem not to bear any trace of this name; the only mention of 'Uraydī is found instead in the modern note on the cover sheet of ms. 4. Perhaps precisely this note gave rise to the confusion that led 'Uraydī to be identified as the translator of these manuscripts, rather than Ṭarza'ī. Indeed, it seems to be an additional observation, inserted perhaps by a cataloguer or a librarian, containing information regarding the activity of a Persian translator known to him for other reasons, that is to say precisely 'Uraydī, the author of the joint translation of *Ilāhiyyāt* and *Išārāt* testified to by ms. 8. Otherwise, the note might originate from the catalogue of Dānišpažūh, regarding the *Miškāt* collection of the University of Tehran⁷.

⁷ DĀNIŠPAŽŪH, *Fihrist-i kitābkhānah-i Ihdā'ī-yi Āqā-yi Sayyid Muḥammad-i Miškāt* cit., pp. 199-200. The data are also given in DIRĀYATĪ, *Fehrestgān-e Noskhe-ha-ye Khattī-ye Iran (Fankha)* cit., IV, p. 785 and MUNZAVĪ, *Fehrestvāra-ye Ketābhā-ye Fārsī* cit., p. 104.

V. CONCLUSION

The direct examination of the manuscripts so far conducted would seem to point to the existence of two Persian translations of the *Metaphysics* section of *Šifā'*: the first one represented by mss. 1, 4, 5, 6 and 7 and attributable to 'Alī Riḍā Ṭarza'ī ibn Mawlānā Šams al-Dīn Ḥalḥālī; and the second one preserved by ms. 8 and ascribable to 'Alī Sayyid 'Alī al-Ḥusaynī al-'Urayḍī al-Imāmī. Therefore, 'Urayḍī would be the author of the double translation of *Ilāhiyyāt* and *Išārāt* and consequently would not bear any relationship with the translation attributed to Ḥalḥālī, preserved in copies 1, 4, 5, 6 and 7.

However, these hypotheses are yet to be verified, considering that the data obtained and so far analyzed do not make it possible to reach definitive conclusions. Only careful textual investigation can provide more certain data in support of these arguments.

APPENDIX: BIBLIOGRAPHICAL SOURCES

There follows a list of the data published by the aforementioned studies, in order clearly to see the manuscript copies identified and the corresponding information for each of them:

DĀNĪŠPAZŪH, *Fihrist-i kitābkhānah-i Ihdā'i-yi Āqā-yi Sayyid Muḥammad-i Mishkāṭ, Kitābkhānah-i Dānīshgāh-i Tehrān cit.*, pp. 199-200:

۲۵۱ ترجمه الهیات شفا

سید علی بن محمد بن اسدالله امامی عریضی سیاهانی مترجم اشارات که شاگرد آقا حسین خوانساری (۱۰۹۸م) بوده در روزگار نگارنده ریاض العلما (م ۱۱۳۰) در گذشت شفای شیخ را بیارسی کرد (ذریعه ج ۴ ص ۹-۷۸ و ۱۱۰) نسخه ما که بند ببند سخنان شیخ در آن آمده و ترجمه لفظی و سپس گزارش شده گویا از همو باشد.

ID., 'Introduction', in IBN SĪNĀ, *Al-Nağāt min al-ğarq fī baḥr al-ḍalālāt cit.*, p. 95:

ترجمه های الهی شفاء به فارسی

۱، از علی رضا طرزه ای پسر شمس الدین خلخانی در ۱۰۴۸ در کابل نسخه ۴۳۱ فلسفه آصفیه (۳: ۴۹۲) فن ۱۳.
۲، از علی عریضی سیاهانی مترجم اشارات ابن سینا و نگارنده هشت بهشت در ترجمه هشت کتاب حدیث (فهرست یزد ۱: ۱۳۹ ص ۱۰۷)

بندبند متن در آن آمده و ترجمه لفظی و گزارش شده است. نسخه های آن:

۱، ۲۵۱ دانشگاه (۳: ۱۹۹) که فیلم هم دارد (۱: ۴۹ ش ۲۳۰۰)
۲، ثقه السلام در تبریز نوشته ۱۰۸۷ (نشریه ۴: ۴۲۵)
۳، شماره ۱۹۱۲ مجلس (۵: ۴۰۲) فیلم ۲۳۰۰ عکس. ۵۳۸۰ دانشگاه (۱: ۴۹)
۴، شماره ۲/ ۱۸۴۰ مجلس (۵: ۴۰۴ ص ۴۵۷) نسخه) باشرح نجات اسفراینی که نخستین است و پس از آن شرح اثبات واجب که سوم است (۲۹۷) نوشته ۱۳۱۸

DIRĀYATĪ, *Fehrestvare-ye Dast-Nevesht-haye Iran (Dena) cit.*, vol. II, p. 133, vol. VI, pp. 1202-1203:

الهیات شفا (ترجمه) / فلسفه / فارسی [۱]
حسینی عریضی، علی بن محمد (— ق ۱۱ ق)
تهران، دانشگاه ش: ۲۵۱

الشفاء (ترجمه) / فلسفه / فارسی [۴]
حسینی عریضی، علی بن محمد (— ق ۱۱ ق)

تبریز، ثقة السلام ش : ۷
 تهران، دانشگاه ش : ۹۰۸۱
 تهران، دانشگاه ش : ۲۳۰۰ ف
 تهران، دانشگاه ش : ۲۳۰۳ ف

الشفاء (ترجمه و شرح) / فلسفه / فارسی [۲]
 تهران، مجلس ش : ۱۹۱۲
 تهران، مجلس ش : ۱۸۴۰ / ۲

Id., *Fehrestgān-e Noskhe-ha-ye Khatti-ye Iran (Fankha)* cit., vol. IV, pp. 785-786, vol. XXI, pp. 79-80:

الهیات شفا (ترجمه) / فلسفه / فارسی [۷]
 حسینی عریضی، علی بن محمد، ق ۱۱ قمری
 تبریز، ثقة السلام ش : ۷
 تهران، دانشگاه ش : ۲۵۱
 تهران، دانشگاه ش : ۹۰۸۱
 تهران، مجلس ش : ۱۹۱۲
 تهران، دانشگاه ش : ۲۳۰۰ ف
 تهران، دانشگاه ش : ۲۳۰۳ ف
 قم، مرعشی ش : ۱۵۰۵ عکسی

الشفاء (ترجمه و شرح) / فلسفه / فارسی [۱]
 تهران، مجلس ش : ۱۸۴۰ / ۲

ESMAEILI, *The Commentary Tradition on the Ilāhiyyāt of the Shifā'* cit., p. 8:

«By 'translations' only Persian translations of the *Shifā'* are meant. Manuscript catalogues consulted so far make mention of at least three translations:

1) In the library of Tehran University there is a translation of the *Metaphysics* of the *Shifā'* that was made by 'Alī 'Urayqī Imāmī of Isfahan, a student of Āqā Ḥusayn Khwānsārī (d. 1098 AH). The catalogue of the library of the Majles-i Shūrā-yi Eslāmī, likewise in Tehran, mentions an 'anonymous' translation of the *Metaphysics* of the *Shifā'*. After comparison of this translation with the one in Tehran University, it became clear that it is the same one, done by 'Alī 'Urayqī.

2) In addition to the above, the catalogue of the Āṣefiye Library in Haydarābād Deccan (India) mentions a translation of the *Metaphysics* of the *Shifā'* that was made by one 'Alī Riqā Ṭarze'ī, whom I have not been able to identify so far. But given that the manuscript in question was completed in Kabul in 1048 AH, Ṭarze'ī made his translation no later than this date.

3) A third translation was made in the thirteenth century AH by Mirzā Ḥusayn 'Alī, better known as Muḥaqqiq-i Khalkhālī, a student of Mirzā Abū al-Ḥasan Jilwāh (1202-1275 AH solar). It is not clear whether the translation by Muḥaqqiq-i Khalkhālī only comprises the *Metaphysics* of the *Shifā'* or also other parts of it ».

ḤĀ' IRĪ, *Fihrist-i kitābkhānah-i Majlis-i Shūrā-yi Millī* cit., pp. 297-298, 402-404:

۲ / ۱۸۴۰ ترجمه فن سیزدهم شفاء شیخ الرئیس (= الهیات) در ۲۰۷ صفحه (ص ۱۷۹-۳۸۷)
 ۱۸۴۰ شفاء (ترجمه و شرح...)
 ۲۱۹۱. شفاء (ترجمه و شرح...)

Handbook of Andra Pradesh Government Oriental Manuscripts Library and Research Institute cit, p. 85:

۴۳۱، علی رضا طرزی بن شمس الدین خلخلی، ترجمه شفاء

IṢFAHĀNĪ, 'Introduction', in IBN SĪNĀ, *Ibn-i Sīnā Kitāb al-Shifā' (Metaphysics)* cit., p. 100:

۶۵. الطرازه ای، علی رضا، ترجمه الهیات ← آصفیة کابل / ۴۳۱
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 ← هذه المجموعة

KANTŪRĪ, *Fihrist-i kutub-i 'arabī wa fārsī wa urdū maḥzūnah-i Kutubhānah-i Āṣafiyah-i Sarkār-i 'Ālī* cit., pp. 492-493:

۱۳۴، علی رضا طرزی بن شمس مولان الدین الخلخالی، ترجمه شفاء، فن ثالث عشر

MAHDAVĪ, *Fihrist-i nuṣṣahā-yi muṣannaḥāt-i Ibn-i Sīnā* cit., p. 174:

الهیات: طبق نسخه کتابخانه مشکات شماره ۱۵۲ (مورخ ۴۸۰۱ ق) مترجم نامعلوم

MUNZAVĪ, *Fehrestvāra-ye Ketābhā-ye Fārsī* cit., pp. 104-105:

ترجمه تنها بخش الهیات آن از سید علی فرزند محمد فرزند اسد الله امامی عریضی سپاهانی
 ”شاگرد مجلسی دوم (د ۱۱۱۰ ق) و آقا حسین خوانساری (د ۱۰۹۸ ق) بوده و به روزگار نگارنده
 ”ریاض العلماء“ (د ۱۱۳۰ ق) در گذشته است. و از هموست ”اشارات، ترجمه“ (هف).

صفا (۳۱۵/۵) ضمن بر شمردن کارهای خوانساری پیشگفته از ”ترجمه الهیات شفا“ نام برده که گویا همین است و لغزشی است و این ترجمه از شاگردش است نه او.

SIDDIQI, *Fihrist-i nushahā-yi fārsī-yi kitābkhānah-i Raḍā*, Rampur cit., p. 313 :

ترجمه کتاب الشفاء فن ثالث عشر (فن الهیات) ۱۱۳۸
مولانا علی رضا الطرزی بن شمس الدین الخلیلی
(۵۱۰۴۸)

ABSTRACT

On the Persian Translations of Avicenna's Ilāhiyyāt

This paper presents a preliminary study of the translations into Persian of the *Metaphysics* section of Avicenna's *Šifā'*. During the Safavid dynasty a considerable number of commentaries and translations from Arabic into Persian contributed to the spread of the philosophical works of the complex Islamic intellectual scenario. The Peripatetic legacy, the *išrāqī* current, the *ṣūfī* tradition and the Iṣfahān School deeply influenced both the reading of philosophical texts and the doctrinal and terminological choices of the time. The Persian translations of Avicenna's *Metaphysics* are undoubtedly to be inserted in this varied context. The present research provides a new focus on the transmission and reception of Avicenna's text in the Persian cultural environment, but the manuscript heritage of this production still remains to be explored in detail.

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INDICI

a cura di

MARIO BERTAGNA

INDICE DEI MANOSCRITTI

ALIGARH

MAULANA AZAD LIBRARY

Ms. Aligarh Muslim University, Subhān
Allāh 110/53 'A, p. 494

Ms. Aligarh Muslim University, University
'Ulūm 3 'A, p. 494

ANKARA

MİLLÎ KÜTÜPHANE (NATIONAL LIBRARY)

Ms. B153, p. 510

ÜNİVERSİTESİ İLÂHİYAT FAKÜLTESİ KÜTÜPHANESİ

Ms. 36910-11, p. 491

BENARES

ĞĀMĪ 'A ĞĀWĀDIYYA

Ms. 95, p. 55

BERLIN

DEUTSCHE STAATSBIBLIOTHEK

Ms. Minutoli 223, p. 492

Ms. Minutoli 229, pp. 490, 510

BRUGGE

BIBLIOTHEEK VAN HET GROOT SEMINARIE

Ms. 99/112, pp. 406, 411

STEDELIJKE OPENBARE BIBLIOTHEEK

Ms. 424, p. 72

Ms. 510, pp. 3, 7, 11, 16, 32

IL CAIRO

DĀR AL-KUTUB AL-MİŞRIYYA

Ms. 262 *ḥikma wa-falsafa*, p. 384

Ms. 826 *ḥikma wa-falsafa*, p. 493

Ms. 894, p. 141

Ms. Ḥikma 6 M, p. 312

MAKTABAT AL-AZHAR AL ŠARĪF

Ms. Beḥīt 331 *falsafa (ḥuṣūṣiyya)*, 44988
(*'umūmiyya*), pp. 57-58, 106, 123, 130,
141, 384-385, 485

Ms. Ḥikma 24, *ḥuṣūṣiyya* 331, p. 227

CHICAGO

NEWBERRY LIBRARY

Ms. 23, p. 335

CITTÀ DEL VATICANO

BIBLIOTECA APOSTOLICA VATICANA

Ms. Chis. E. VIII. 251, pp. 401, 406-407, 412

Ms. Reg. lat. 1870, p. 125

Ms. Urb. lat. 186, pp. 224, 233, 242, 322-327,
331, 343-345

Ms. Urb. lat. 187, p. 345

Ms. Urb. lat. 206, pp. 354, 359

Ms. Vat. lat. 725, p. 335

Ms. Vat. lat. 2186, pp. 16, 24, 32, 322

Ms. Vat. lat. 4426, p. 335

Ms. Vat. lat. 4428, pp. 3, 7, 32, 425, 437

CORDOBA

BIBLIOTECA DEL CABILDO

Ms. 52, p. 16

BIBLIOTECA COLOMBINA

Ms. 5.6.14, p. 335

DUBROVNIK

DOMINIKANSKI SAMOSTAN

Ms. 20 (36-V-5), p. 230

Ms. 63 (36-V-6), pp. 16, 23

DURHAM

CHAPTER LIBRARY

Ms. C. III. 1, p. 353

ERFURT

STADTBIBLIOTHEK

Ms. Amplon. Q. 15, p. 335

FIRENZE

BIBLIOTECA MEDICEA LAURENZIANA

Ms. Plut. 90 Sup. 64, pp. 150-151, 177

Ms. S. Crucis Plut. XIII sin. cod. 9, p. 406

GRAZ

UNIVERSITÄTSBIBLIOTHEK

Ms. 482, pp. 16, 24, 32, 335

HÖY

MADRASA-ı NAMÂZİ

Ms. 623, p. 557

HYDERABAD

ĀŞAFIYYA LIBRARY

Ms. 431, p. 556

ISTANBUL

KÖPRÜLÜ HALK KÜTÜPHANESİ

Ms. Fazıl Ahmet Paşa 894, p. 57

NURUOSMANIYE KÜTÜPHANESİ

Ms. 2709, pp. 162, 173, 510

Ms. 2710, p. 57

SÜLEYMANIYE KÜTÜPHANESİ

Ms. Ayasofya 2441, pp. 384-385

Ms. Ayasofya 4795, p. 390

Ms. Carullah 1333, p. 384

Ms. Carullah 1424, p. 58

Ms. Damat İbrahim Paşa 822, pp. 106, 141, 143, 371, 388

Ms. Damat İbrahim Paşa 823, p. 493

Ms. Damat İbrahim Paşa 824, pp. 55, 106, 123, 135, 143

Ms. Fatih Camii 5316, p. 388

Ms. Lâleli 2550, p. 55

Ms. Ragıp Paşa 909, p. 58

Ms. Ragıp Paşa 910, p. 55

Ms. Şehid Ali Paşa 1748, p. 55

Ms. Yeni Câmi, Hatice Sultan 208, p. 55

TOPKAPI SARAYI MÜZESİ KÜTÜPHANESİ

Ms. Ahmet III 3262, p. 55

Ms. Ahmet III 3445, p. 55

KOLKATA

ASIATIC SOCIETY OF BENGAL LIBRARY

Ms. Ar. 102, pp. 491, 498

KRAKOW

BIBLIOTEKA JAGIELLOŃSKA

Ms. 1718, p. 335

LEIDEN

UNIVERSITEITSBIBLIOTHEEK

Ms. Or. 4, pp. 9, 106, 123, 130, 141, 143, 384, 494

Ms. Or. 84, pp. 106, 143

Ms. Or. 166, p. 403

Ms. Or. 583, pp. 251, 257-258

Ms. Or. 4719, p. 372

LEIPZIG

UNIVERSITÄTSBIBLIOTHEK

Ms. 1392, pp. 354, 359

LONDON

BRITISH LIBRARY

Ms. Or. 1811, p. 485

Ms. Or. 5280, p. 372
 Ms. Or. 5719, p. 372
 Ms. Or. 7500, p. 141
 Ms. Or. Add. 7511, p. 403

MADRID

BIBLIOTECA NACIONAL
 Ms. 5008, pp. 304, 306, 327

MASHHAD

KITĀBHĀNAH-I ĀSTĀN-I QUDS-I RAZAVĪ
 Ms. 771, p. 384
 Ms. 7347, pp. 492-494, 498
 Ms. 13963, p. 384

MÜNCHEN

BAYERISCHE STAATSBIBLIOTHEK
 Clm. 8001, p. 335

NAPOLI

BIBLIOTECA NAZIONALE
 Ms. VIII. E. 33, pp. 16, 24, 32, 81
 Ms. XI. AA. 49 (2), p. 335

NUREMBERG

STADTBIBLIOTHEK
 Ms. Cent. V. 21, p. 335

OXFORD

BODLEIAN LIBRARY
 Ms. Bodl. 675, pp. 123, 136, 138-139
 Ms. Bodl. 679, pp. 107, 125
 Ms. Digby 76, p. 123
 Ms. Digby 217, pp. 16-17, 25
 Ms. Hunt. 534, p. 312
 Ms. Pococke 114, p. 384
 Ms. Pococke 116, p. 384
 Ms. Pococke 121, pp. 106, 141, 143-144
 Ms. Pococke 125, p. 494
 Ms. Selden supra 24, pp. 26, 351, 353, 359

MERTON COLLEGE LIBRARY
 Ms. 282, pp. 16, 24, 32

ORIEL COLLEGE LIBRARY
 Ms. 7, p. 16

PALERMO

BIBLIOTECA COMUNALE
 Ms. Qq. G. 31, p. 335

PARIS

BIBLIOTHÈQUE NATIONALE DE FRANCE
 Ms. Ar. 2346, pp. 172, 177, 180, 207
 Ms. Ar. 6527, p. 141
 Ms. Ar. 6829, pp. 141, 492
 Ms. Lat. 6443, pp. 16, 24, 32, 425, 437
 Ms. Lat. 7131, p. 353
 Ms. Lat. 14700, p. 138
 Ms. Lat. 16096, p. 16
 Ms. Lat. 16673, pp. 150, 156-157, 159, 177

POMMERSFELDEN

SCHLOSSBIBLIOTHEK
 Ms. 159, p. 411

QUM

KITĀBHĀNAH-I MAR'ĀŠĪ
 Ms. 1505, p. 555

KITĀBHĀNAH-I MASĠID-I A'ẒAM
 Ms. 1760, p. 510

MARKAZ-I IHYĀ'-I MĪRĀT-I ISLĀMĪ
 Ms. 3054, p. 384

RAMPUR

RAMPUR RAZA LIBRARY
 Ms. 1138, p. 555
 Ms. 3483, p. 494

ROMA

BIBLIOTECA ANGELICA

Ms. 242 (C.4.10), pp. 16, 24

BIBLIOTECA DEL COLLEGIO DI S. ISIDORO

Ms. I/10, p. 359

SAN LORENZO DE EL ESCORIAL

REAL BIBLIOTECA DEL MONASTERIO DE SAN LORENZO
DE EL ESCORIAL

Ms. 844/5, p. 371

ST. PETERSBURG

STATE UNIVERSITY LIBRARY

Ms. 171 Rosen, pp. 371-372

TABRIZ

ṬIQAṬ AL-ISLĀM LIBRARY

Ms. 7, p. 556

TEHRAN

KITĀBHĀNAH-I MADRASAH-I ʿĀLĪ-I SIPAHSĀLĀR

Ms. 8331, p. 57

KITĀBHĀNAH-I MAĠLIS-I SHŪRĀ-YI ISLĀMĪ

Ms. 1143, p. 403

Ms. 1840/2, p. 558

Ms. 1898, p. 494

Ms. 1912, p. 558

KITĀBHĀNAH-I MARKAZĪ-YI DĀNIŠGĀH-I TIHRĀN

Ms. 108, p. 34

Ms. 2300, p. 555

Ms. 2303, p. 555

Ms. 6596, p. 58

Ms. 9081, p. 557

Ms. Miškāt 243, p. 58

Ms. Miškāt 251, p. 557

KITĀBHĀNAH-I MILLĪ ĞUMHURĪ-YI ISLAMI-YI IRAN

Ms. 1327, pp. 384, 495, 507

Ms. 1801, p. 55

Ms. 3843, p. 494

Ms. 20348-5, p. 558

KITĀBHĀNAH-I MILLĪ MALIK

Ms. 4276, pp. 31-32, 53

TOLEDO

BIBLIOTECA CAPITULAR

Ms. 47.15, pp. 150-151, 177

INDICE DEI NOMI*

- ‘Abbās I, 553
 Abbès M., 441
 ‘Abd al-Kāfi Ibn ‘Abd al-Mağīd Ibn ‘Abd Allāh al-Tabrizī, 57
 ‘Abd al-Karīm ibn Hādī al-Qazvīnī, 558
 ‘Abd al-Raḥman Ibn ‘Alī Ibn Mu‘ayyad, 38
 ‘Abd al-Zahīr ibn al-Ma‘šūm Karahrūdī (o Garmrūdī), p. 557
 ‘Abdallāh al-Ḍahabī, 101
 Abū Bakr ‘Abd Allāh Ibn Aḥmad Ibn ‘Abd Allāh al-Tabrizī, 58
 Abū Bišr Mattā, ibn Yūnus, 275-276
 Abū Ġa‘far al-Ḥāzin, 276
 Abū Ḥāšim al-Ġubbā‘ī, 308
 Abū Ṭāhir Šams al-Dawla, 61, 378, 401
 Abū Zayd al-Balḥī, 276
 Achena M., 96
 Ackrill J. L., 71
 Adamo di Bockfeld (Bockenfield), 224, 353-354, 359
 Adamson P., 220, 243, 273, 333-334, 336, 376, 549
 Aertsen J. A., 443
 ‘Afīfī A., 106-107, 123, 130, 135, 138, 141, 143, 452
 Agostino di Ippona (e ps.), 8-9, 12-13, 76, 519, 542, 546-547, 550
 Aḥmad R. U., 367
 Ahmed A. Q., 126, 245, 503
 Aḥmed M., 553
 al-Ahwānī A. F., 4, 30, 386, 502
 Akasoy A., 336
 Akl Z. B., 441
 Alberto Magno, 25-27, 71-80, 82-84, 86-89, 91, 93-102, 223-224, 318, 320, 322, 337-338, 345, 354-356, 407-409, 442, 469, 471-474, 528, 548, 551
 Alcuino di York, 542
 Alessandro di Afrodisia, 253, 257, 276, 278-280, 284, 296, 316, 338, 443
 Alfredo di Sareshel (Shareshill), 331, 333-335, 338, 340-342, 351-358
 ‘Alī Riḍā Ṭarza‘ī (ibn Šams al-Dīn al-Ḥalḥālī), 556, 559-562, 564
 Allard A., 74, 219
 Allard B., 518
 Alonso Alonso M., 32, 220, 277, 317, 321, 324, 327, 335, 337, 344, 347, 403, 516-517, 539
 Alonso Del Real C., 339, 517
 Alpina T., 62, 239, 481, 504, 553
 Alwishah A., 96, 134, 287
 Aminrazavi M., 559
 Amīr al-Dīn Māniyūl, 162
 Ammannati G., 149
 Ammonio, 17
 al-Āmulī Ḥ. Ḥ., 382
 Anawati G. C. v. Qanawātī Ğ. Š.
 Andrea Alpago, 372, 376, 388
 Andrews R., 73, 76, 102, 469, 471
 Anzulewicz H., 548
 Aouad M., 29, 149, 153, 156, 177-178, 180, 186, 193, 327, 481
 Apuleio, 10, 12, 21
 Āqā Ḥusayn ibn Muḥammad al-Ḥwānsārī, 556, 559, 564
 Ardebilī F., 556
 Arfa Mensia M., 288
 Aristotele, 9, 22, 26-27, 44, 59-60, 71, 73-75, 79, 83-84, 90, 94-95, 97-100, 110, 122, 149-158, 160, 169-170, 172-173, 177-178, 181, 184-185, 189, 191-192, 194, 196, 198, 200-201, 203-205, 221-223, 239, 244-247, 250, 252, 254-257, 261, 266-268, 274-281, 283, 285-286, 295-296, 299-300, 302-303, 307-312, 314-318, 320-322, 334-337, 341-343, 347, 351, 353-354, 357-358, 376, 378-381, 383-384, 401-410, 412, 442-443, 445, 449, 451-453, 456-459, 461-462, 468, 470-471, 473-474, 485, 503, 508, 520, 541, 543, 549-550
 Arlt G. O., 404

* La traslitterazione dei nomi arabi inclusi nel presente indice è quella adottata dagli autori dei contributi o presente nelle voci bibliografiche da loro citate. Eventuali traslitterazioni alternative sono riportate fra parentesi tonde.

- Armengaud Blaise, 372
 Arnau de Vilanova (Arnaldo di Villanova), 371-372, 388
 Arnzen R., 239, 317, 420, 441-442, 448, 469, 483, 512
 Arzhanov Y., 420
 As'ad Ibn 'Alī Ibn 'Uṭmān al-Yānyawī, 58
 Ashdowne R. K., 229
 Aspasio, 184
 Astesiano A., 553
 Atanasio di Balad, 179
 Aubert R., 323
 Augustin J. J., 404
 Auvergne v. Guglielmo di Auvergne, Pietro di Auvergne
 Avendauth (Abraham Ibn Daud, Ben David Halevi), 1-7, 9-27, 31-32, 75, 220, 322, 332, 334, 343, 367, 371, 515-517, 522, 532-533, 536-538, 547-549
 Averroè (Ibn Ruṣd), 74, 101, 149-157, 160, 177-178, 180-186, 188-189, 192-197, 200, 202-204, 206-209, 224, 253, 275, 280, 286, 296, 316, 339-341, 345, 404-406, 417, 424, 460, 549
 Avicenna (Ibn Sīnā) (e ps.), 1-11, 13-18, 20, 22-27, 29-36, 38, 42-56, 59-63, 71-102, 105-118, 120-122, 124-125, 127-130, 132-136, 139-140, 142-146, 149-158, 160-174, 178, 183-186, 192, 203-204, 209, 219-228, 230-237, 239-240, 242-247, 250, 252-254, 258-268, 273-274, 277, 281, 283-298, 301-319, 321-326, 328, 331-334, 336-340, 343-345, 348, 351, 353, 365-369, 371-381, 385-388, 401-402, 404-412, 418-419, 421, 424, 426, 428, 437-438, 441-479, 481-486, 489-490, 492-493, 495-496, 498-509, 511-512, 515-517, 519-528, 532, 534-540, 542, 544-551, 553-555, 563, 565
 al-Bābā M. Z., 371, 389
 Bäck A., 75, 78, 91
 Bacone v. Ruggero Bacone
 Badawī 'A., 106, 123, 126, 129-130, 138, 141, 143, 172, 190, 251, 257, 286, 308, 403, 410
 Baeumker C., 334, 351
 Bahmanyār, Ibn al-Marzubān, 33-34, 495-497
 Bakker P., 296
 Bakoš J., 366, 381, 383
 Balaudé J.-F., 255
 Balme D. M., 401
 Baltussen H., 273
 Bar Hebraeus, 156, 172, 179, 409
 Barnes J., 52, 452, 457
 Barragán Nieto J. P., 337
 Baur L., 106-107, 123, 125-130, 135, 137-139, 517
 Bausani A., 483
 Bayhan N., 221-222
 al-Bayhaqī, 33, 61
 Beale-Rivaya Y., 515
 Beckmann J. P., 443
 Beda il Venerabile, 539
 Bekker I., 153
 Benzi v. Ugo Benzi
 Berger F., 401
 Berjak R., 309
 Bertola E., 549
 Bertolacci A., 2, 6-7, 10, 26, 29-30, 32-33, 36, 61, 71, 74, 76-77, 79, 85, 102, 114, 149, 162, 219, 239, 242, 316, 322, 331, 333, 336, 340, 344, 353, 365, 367, 374, 376, 386, 401, 404, 417, 432-433, 435, 437, 441, 443-445, 447-450, 452-453, 474, 476, 483, 485, 490, 492, 496, 499, 501, 508-510, 515-516, 534, 549-550, 553
 Beullens P., 403, 409
 Beyers R., 222, 258, 410
 Bianchi L., 150
 Biard J., 91
 Bīdārfar M., 466
 Bignami-Odier J., 32
 Birkenmajer A., 3, 7-9, 11, 151
 al-Bīrūnī, Abū Rayḥān Muḥammad ibn Aḥmad, 309-312, 316
 al-Bitrūḡī, 341, 403-404
 Bodnar I., 296
 Boezio A. M. T. S., 6, 21, 74, 94, 98, 519, 539, 542, 547, 550
 Boggess W. F., 149, 151, 153-154, 177, 181

- Bonelli M., 257
 Borgnet A., 71, 76, 356, 473
 Bos G., 371
 Bossier F., 403, 417
 Boulnois O., 499
 Bouquet J., 12
 Bouyges M., 11, 460
 Braakhuis H. A. G., 223
 Brams J., 222-223, 410, 417
 Brewer J. S., 11, 181
 Bridges J. H., 11
 Brisson L., 336
 Brockelmann C., 31, 33, 370-371, 389
 Brower J., 87-89, 95
 Brugmann J., 402-403, 410
 Brumberg-Chamont J., 72
 Bülow G., 517-518
 Burnett C., 2, 4, 6, 32, 105, 220, 322, 333-334, 339, 341, 401, 405-406, 408, 417, 420, 516, 518, 541
 Busic J., 515
 Busse A., 17
 Büttner A., 339, 367, 516
 Bychov O. V., 470
- Cachia P., 17
 Caiazza I., 335, 515
 Calcidio, 335, 339
 Calma M. D., 499
 Caminada N., 73, 78, 459, 503
 Camus C., 12
 Carmody F. J., 404, 408
 Carpentier P., 159
 Cassiodoro, 542
 Cathala M.-R., 469
 Celli G., 149, 153, 155, 158, 162
 Cerami C., 253, 280, 283, 296, 300, 316, 320, 441
 Chase M., 273, 296, 300, 307
 Chemin A., 32
 Chiron P., 190
 Cicerone M. T., 8-9, 12, 21, 335, 539, 542
 Coda E., 107, 258, 276, 279-280, 525
 Cohen G. D., 2
- Contamine G., 516
 Conti A. D., 74, 76
 Correns P., 517
 Cortabarria A., 74
 Courtois V., 401
 Crämer-Rügenberg I., 273, 403
 Crossley J. N., 2, 32, 71, 322, 331, 353, 515
 Cureton W., 242
- D'Alverny M.-T., 1, 4-7, 13, 15, 17, 19, 22-23, 25, 32, 219, 322-324, 331, 335, 366, 404-407, 425, 516, 518, 550
 Dadkhah G., 239, 553
 Dahan G., 150
 Daiber H., 156, 370, 408, 410
 Damasceno v. Giovanni Damasceno
 Daniele di Morley, 318
 Dānišpažūh M. T., 554-557, 561, 563
 David, commentatore di Aristotele, 17
 De Diego Lobejón M. W., 181
 De Smet D., 7, 89, 221, 230, 243, 286, 401, 418, 502
 De Vaux R., 548-550
 Decorte J., 89
 Del Punta F., 149
 Dhanani A., 369, 505
 Di Donato S., 353, 482
 Di Giovanni M., 365
 Di Martino C., 331-333
 Di Vincenzo S., 5, 9, 17-19, 32, 57-59, 71, 78, 365, 459, 503, 511, 553
 Dias Farinha A. M., 366
 Dībāḡī I., 34
 Diels H., 256
 Dirāyatī M., 31, 554-558, 561, 563
 Dodge B., 275
 Domenico Gundissalino, 1, 4-6, 9, 14-15, 20, 22-23, 27, 32, 71, 75-77, 105-107, 124-126, 128, 133, 136, 138, 141-142, 144-146, 219, 322, 332, 338-339, 341-343, 367, 371, 481-482, 515-551
 Donati S., 73, 76, 103
 Dozy R., 430-431
 Draconzio, 12

- Dronke P., 23, 549
 Drossaart Lulofs H. J., 334, 351, 402-403, 410
 Du Cange C., 159
 Dubois J., 277
 Dufour M., 246, 252, 255, 261
 Dulong M., 151
 Dunyā S., 481
 Durrany K. S., 367

 Ebbesen S., 73
 Egidio Romano, 150-152, 338
 Eichner H., 449, 454, 467
 Elia da Cortona, 407
 Endress G., 252, 275, 420
 Enrico Aristippo, 353-354
 Enrico di Colonia, 407
 Ergin O., 31, 389
 Eriugena v. Giovanni Scoto Eriugena
 Ermanno Alemanno, 71, 149-162, 164-175,
 177-178, 180-186, 189, 192-193, 195-200,
 202-203, 206-209
 Ermanno di Carinzia, 538
 Esmaeili M. J., 554-556, 564
 Etzkorn G., 102, 469, 471
 Euclide, 116
 Eustrazio, 184

 Fadlallah H., 149
 Faḥrī M., 110
 Falcon A., 289
 al-Fārābī, Abū Naṣr, 26, 72, 74, 87-88, 94, 110,
 149-152, 177-178, 181, 183, 185-187, 189,
 191-192, 198-200, 208-209, 274, 276, 289,
 296, 299-303, 308, 316, 338-340, 443-445,
 449-450, 454-455, 467, 482, 517, 519, 521,
 533, 539
 Fattori M., 404
 Fauser W., 26
 Federici-Vescovini G., 371
 Federico da Montefeltro, duca di Urbino,
 224, 323, 345
 Federico II Hohenstaufen, imperatore, 341,
 404-405, 407, 412
 Ferrero Alemparte J., 180

 Fidora A., 14, 22, 32, 105-106, 333, 339, 515,
 531, 539-540, 547
 Filius L. S., 403
 Filopono v. Giovanni Filopono
 Flügel G., 275
 Fontaine R., 2, 6, 11-12, 19, 22, 27, 220, 243,
 406, 532
 Fraenkel C., 340, 482
 Franceschini E., 151
 Fredborg K. M., 515
 Fredouille J.-C., 278
 Freiberg G., 351
 French R., 351
 Freudenthal G., 1, 6, 13, 24, 32, 333-334, 367
 Fumo J. C., 340, 482
 Furley D., 222

 Gacek A., 58, 485
 Ġa'far ibn Muḥammad al-Ṣādiq, 559
 Gál G., 102, 469, 471
 Galeno Claudio, 376, 379, 402
 Gauthier R., 184
 al-Ġazālī, 26, 74-79, 96, 339, 532, 536-537,
 539, 548
 Geoffroy M., 483, 499
 Georr K., 90, 92
 Gerardo di Cremona, 7, 223, 275, 334, 341-
 342, 353, 372, 407, 516, 519
 Germann N., 367, 441
 Geyer B., 472
 Ghassemlou F., 553
 Giacomo Anatolio, 405
 Giacomo di Edessa, 179
 Giacomo Veneto, 222-223
 Giamblico, 279, 281
 Giannakis E., 251
 Giglioni G., 336
 Gilson É., 548
 Giorgio, vescovo degli Arabi, 179
 Giorgio di Trebisonda, 151
 Giovanni, arcivescovo di Burgos, 177
 Giovanni, traduttore di al-Ġazālī, 76
 Giovanni II, arcivescovo di Toledo, 515
 Giovanni di Castelmoron, 4, 19, 22, 24

- Giovanni Damasceno, 74
 Giovanni Duns Scoto, 102, 223, 442, 469-471, 474
 Giovanni Filopono, 222, 257, 274, 289, 295-296, 299-301, 303, 307-308, 310-314, 316, 462
 Giovanni Gonsalvi (Gonzalo) di Burgos, 74, 242, 323-324, 340, 343-345
 Giovanni Pago, 102
 Giovanni Scoto Eriugena, 551
 Giovanni di Spagna, 516
 Glasner R., 221, 253, 296, 317-318
 Goddu A., 273
 Gohlman W. E., 61-62, 369, 378, 493
 Gonzalo García Gudiel, 220, 323, 343-345, 403, 406
 Gonzalez Ruiz R., 180
 Gotthelf A., 401, 409
 Goulet R., 258, 275
 Goulet-Cazé M.-O., 244, 278
 Gracia D., 367
 Green R., 102, 469, 471
 Greene R., 542
 Gregorio IX, papa, 405
 Grinaschi M., 72-73, 75-80, 82-84, 86, 88-91, 97-99, 101, 103, 178
 Groisard J., 335
 Grossatesta v. Roberto Grossatesta
 Gruner O. C., 372
 Guglielmo di Auvergne, 518
 Guglielmo di Conches, 515, 539
 Guglielmo di Luna, 74, 417
 Guglielmo di Moerbeke, 74, 150, 222-223, 345, 403
 Gundissalino v. Domenico Gundissalino
 Gutas D., 4, 8-12, 29, 31, 54, 102, 252, 312-313, 369-370, 373, 375, 380-381, 389, 401, 483, 502-505
 Gutman O., 317-318, 322
 al-Ġūzġānī, Abū 'Ubayd 'Abd al-Wāḥid ibn Muḥammad, 4, 54-55, 59, 61-62, 366-369, 373-374, 376-381, 384-387, 483-484, 503-506, 511-512
 al-Ḥafnī M. A., 502
 Ḥā'irī A., 554, 558, 565
 Hamedanee H. M., 553
 Hameed H. A., 372
 Hamesse J., 101, 223, 277, 404, 417, 482
 Hand W. D., 404
 Hankinson R. J., 278, 280
 Hanna S. A., 299
 Hansen H., 73, 102
 Häring N., 515
 Harvey S., 182, 334
 al-Ḥasanī, 369
 Hasnawi A., 50-51, 100, 221-222, 224, 240, 244-245, 247, 266, 273, 286, 288-289, 295-296, 304
 al-Ḥassan Y., 553
 Hasse D. N., 33, 180, 316, 335-336, 339, 341-342, 353, 367, 404, 408, 428, 482, 496, 516, 527, 542, 545, 549
 Hayduck M., 279, 443
 Hayes J., 96, 134, 287
 Heiberg I. L., 278
 Heinrichs W. P., 179
 Henninger M. G., 87
 Henschel L., 159
 Hernández F. J., 343
 Hissette R., 74, 417, 420, 423-424, 481
 Hockey T., 369, 505
 Hoffmann P., 277-278, 280, 499
 Hogendijk J., 223, 243
 Holmyard E. J., 331, 333, 351
 Honnefelder L., 443, 470
 Hossein Nasr S., 546
 Ḥosseini A., 556
 Hossfeld P., 275
 Hourani G. F., 91
 Howlett D. R., 229
 al-Ḥudayrī M., 4, 30, 386
 Hudry F., 1, 32, 81
 Hugonnard-Roche H., 105, 122-123, 126, 146, 275, 525, 540
 Ibn Abī Uṣaybi'a, Muwaffaq al-Dīn, 276, 318
 Ibn Gabirol, Solomon, 339, 517, 519-521, 524, 527-528, 530-532, 535-538, 542, 544, 548-549

- Ibn Ġaylān al-Balḥī, 370
 Ibn al-Ḥammār, 313
 Ibn al-Nadīm, Muḥammad ibn Ishāq, 178, 275-276
 Ibn al-Ṣalāh, 275-276, 284, 314
 Ibn al-Samḥ, 179, 313
 Ibn Zayla, 60, 313, 501-503, 506
 Ibn Zur'a, Abū 'Alī Ṣā'ib ibn Ishāq, 275-276, 314
 Ibrahim B., 59
 Ibrahim b. 'Abdallāh, 179
 Ierodiakonou K., 367
 Iqbal M., 309
 Isacco Israeli, 339
 Isaia, profeta, 12
 Iṣfahānī H. N., 554-556, 559, 565
 Ishāq Ibn Ḥunayn, 90, 92, 178-180, 250, 275-277, 317-318
 Isidoro di Siviglia, 539, 547
 Iskandar A. Z., 553
 Ismā'il A., 331, 402, 502

 Jabbour J., 490
 Jammy P., 76, 356
 Janos D., 273, 300
 Janssens J., 7, 32-34, 71-74, 76-78, 81-82, 84, 86, 88-89, 93, 98-99, 101, 107, 113, 122-125, 135, 146, 219-224, 230, 239, 242-243, 258, 286, 366, 401, 404, 417-418, 420, 423-424, 426, 428, 483, 496, 502, 525
 Jodogne P., 32, 333, 406
 Jolivet J., 23, 105, 221, 288, 525, 546, 549
 Juda B. Salomon ha-Cohen, 21, 27
 Judycka J., 417

 Kahana-Smilansky H., 317
 Kantūrī T. Ḥ., 554, 565
 Kassel R., 150, 190, 203
 Kelley F., 469, 471
 Kenny A., 254
 Khan M. S., 367, 371-372
 Kilisli R. B., 365, 371, 388-390
 Kilwardby v. Roberto Kilwardby
 al-Kindī, 179, 275, 338-339, 444
 Kitchell K. F., 408

 al-Kiyā, 286, 312, 314
 Konstan D., 239
 Kraye J., 179
 Krech V., 333
 Kretzmann N., 254
 Kruk R., 156, 401-403, 408
 Kwakkel E., 407

 Lacombe G., 151, 405-407
 Lagerlund H., 32, 71, 366
 Lammer A., 287
 Lane E. W., 248
 Langermann Y. T., 221
 Latham R. E., 229
 Latif H. A., 372
 al-Lawkarī, Abū al-'Abbās Faḍl Ibn Muḥammad, 33-34, 39, 41-42, 44, 496-498, 512
 Leicht R., 317
 Leinkauf T., 335
 Lettinck P., 244, 251, 256, 258
 Leunissen M., 254
 Linehan P., 323, 343
 Lippert J., 275
 Lizzini O., 534
 Lofts S. G., 2, 322, 417, 516
 Lohr C., 76, 78
 Long R. J., 334, 351
 Longo A., 257
 Lopez Farjat L., 300
 Lopez-Alvarez A. M., 180
 Lucrezio, 9, 12, 21
 Luna C., 365
 Luquet G. H., 149, 180-182
 Lyons M. C., 172, 179-180, 190, 199

 Macrobio, 542
 Madkūr I. B. (Madkour), 4, 30, 331, 382, 386, 402, 409-410, 412
 Mahdavi Y., 31-32, 38, 242, 369-370, 389, 495, 506-507, 554-555, 557, 565
 Mahdi M., 299-300
 Maier A., 253
 Maimonide v. Mosè Maimonide
 Mandeville D. C., 331, 333, 351

- Mandosio J.-M., 159, 331-335, 345, 353, 371
 Mansfeld J., 277
 Mantas P., 516
 March G., 469, 471
 Marcotte R., 33, 496
 Marmo C., 150
 Marmura M. E., 17, 49, 91, 444, 507, 509
 Martini Bonadeo C., 107, 280, 525
 Martino C., 353
 al-Marwazī, Abū Yaḥyà, 408
 Mašā 'allāh ibn Aṭarī, 74
 al-Masiḥī, Abū Sahl, 276
 Masново A., 518
 Massé H., 96
 al-Ma 'šūmī, Abū Sa 'īd Aḥmad ibn 'Alī, 309-310
 McGinnis J., 51, 220-221, 223, 226, 240, 243, 247-249, 253-254, 260, 264, 286, 288, 304
 McKirahan R., 122
 McVaugh M., 371
 Melville C., 553
 Mews C. J., 2, 32, 71, 322, 331, 353, 515
 Michele di Efeso, 184
 Michele Scoto, 223, 334, 341-342, 345, 353, 401, 403-408, 410-412
 Mignucci M., 452, 457-458
 Minio-Paluello L., 151, 404, 406
 Mirzā Abū al-Ḥasan Jilwah, 556, 565
 Mirzā Ḥusayn 'Alī, Muḥaqqiq-i Ḥalḥālī, 556, 559, 565
 Moerbeke v. Guglielmo di Moerbeke
 Mohaghegh M., 309
 Moraux P., 278
 Morelon R., 50, 100, 224
 Morison B., 255-256, 457
 Mosè Maimonide, 549
 Moussy C., 12
 Mowat J. L. G., 159
 Muckle J. T., 76, 339, 517, 537
 Muḥammad Bāqir Ibn Mu'min Sabzawārī Iṣfahānī, 559
 Muḥammad Ibn Aḥmad al-Uskūbī, 58
 Muḥammad Ibn Muḥammad Ġa 'far, 382
 Muḥammad Ṣāliḥ al-Urdistānī, 58
 Mullā Rağab 'Alī Tabrīzī, 559
 Mullā Ṣadrā (Ṣadr al-Dīn al-Šīrāzī), 500
 Müller A., 275-276
 Muntaşir A., 331, 403, 502
 Munzavī A., 554, 561, 565
 Murdoch J. E., 254
 Mūsā M. Y., 481
 Musallam B. F., 402
 Muṣṭafā Ibn 'Abd al-Dīn Ilyās Ibn Muḥammad, 38
 Nasr S. H., 309, 559
 Newman A. J., 553
 Newton L. P., 74-75
 Nicola di Damasco, 276, 334, 351
 Niermeyer J. F., 228
 Noone T. B., 102, 469, 471-472
 Obrist B., 335, 515
 Olivi v. Pietro di Giovanni Olivi
 Omero, 155
 O'Neill Y. V., 405
 Onorio III, papa, 405
 Opelt I., 275
 Opwis F., 496, 534
 Otte J. K., 351-353, 357-359
 Pallegà de Bustinza V., 553
 Panzeca I., 239, 384
 Paolo Alpago, 376
 Paracchini F., 257
 Pattin A., 74
 Paulus A., 407
 Pellegrin P., 256-257
 Pérez González M., 180
 Pertusi A., 7
 Peters F. E., 250
 Petitmengin P., 278
 Picotti G. B., 323
 Pietro di Alcalá, 430-431
 Pietro di Auvergne, 102
 Pietro di Giovanni Olivi, 223
 Pietro di Zelanda, 371
 Pinborg J., 254

- Pines S., 2, 9, 312-313
 Platone, 94-95, 335-336, 339, 361, 543, 550
 Plauto, 8, 12
 Polloni N., 5, 14, 22-23, 339, 515-517, 520, 523, 528, 531, 533, 536, 538, 549
 Poortman E. L. J., 334, 351
 Porfirio, 1, 4, 6, 14, 17, 30, 33, 40, 44-47, 52, 56, 59, 71, 79-82, 95-96, 485, 500-501, 503
 Pormann P. E., 369, 376
 Porro P., 409
 Pourjavady R., 553

 Qanawātī Ğ. Š. (Anawati G. C.), 4, 30-31, 58, 162, 242, 366, 382, 386, 444, 481
 Qāsim M., 274
 al-Qiftī, 275-276, 308
 Qusta ibn Luqa, 519, 527, 542

 al-Rahim A. H., 33, 54, 60-61, 375, 409
 Rahman F., 250, 365-366, 382-384
 Rashed M., 253, 257, 273, 277, 289, 296, 308, 365, 441, 457
 Rashed R., 105, 221, 288, 525
 al-Rāzī, Abū Bakr, 308
 Reisman D. C., 33, 60-61, 312-313, 370, 375, 409, 466, 495-496, 501, 534
 Renaud M., 323
 Rescher N., 72, 276
 Resnick I. M., 408, 472
 Riccardo Rufo di Cornovaglia, 224
 Rivera Recio J. F., 323
 Rizvi S., 553
 Roberto Grossatesta, 184-185, 224
 Roberto Kilwardby, 74, 76
 Rodrigo di Toledo, 404
 Roediger J., 275
 Rosemann P. W., 2, 322, 417, 516
 Rosen J., 254
 Rosier-Catach I., 91, 150
 Ross W. D., 170, 244
 Rossi P. B., 403
 Roussel B., 277
 Rubino E., 333-334, 351-357, 359-361
 Rudolph U., 72
 Rufo v. Riccardo Rufo di Cornovaglia
 Ruggero Bacone, 11, 181-182, 223-224, 318, 541, 551
 Ryan W. F., 179

 Sacré D., 222
 Şafā D., 559
 Saliba G., 369, 505
 Sālim M. S., 149, 153, 155-156, 158, 160, 163, 166, 171-172, 174
 Salman D. H., 72
 Salomone, traduttore di Avicenna, 74, 220, 242, 323-324, 343-345
 Samuelson N. M., 532
 Sanagustin F., 367
 Santos Noya M., 25
 Sayyid 'Alī (= 'Alī Sayyid 'Alī) ibn Muḥammad ibn Asad Allāh [al-Ḥusaynī] al-'Urayḍī (= 'Arīḍī) [al-]Imāmī [al-]Iṣfahānī (= Siyyāhānī/Sipāhānī), 556-557, 559, 561-562, 564
 Scarzia Amoretti B. M., 516
 Scermino M., 553
 Schenkl H., 239
 Schmidtke S., 553
 Schmitt C. B., 179
 Schneider B., 151, 177
 Schoonheim P. L., 275
 Schrimpt G., 443
 Schulthess P., 2
 Schupp F., 519
 Schwartz Y., 2, 333
 Scoto v. Giovanni Duns Scoto, Michele Scoto
 Sebtī M., 481, 483
 Seneca L. A., 19
 Senner W., 77
 Sesiano J., 518
 Share M., 296
 Sharples R. W., 256-257
 Shihadeh A., 370
 Siddiqi T. V., 367, 555, 565
 Simplicio, 74, 222, 239, 254, 256-258, 278-281, 295-296
 Sinaceur M. A., 286
 Sirat C., 2, 22, 27
 al-Širāzī, Quṭb al-Dīn, 58

- Siriano, 279, 281
 Smith D., 177
 Sorabji R., 239, 254, 256, 277
 Sorge V., 371
 Soto Bruna M. J., 339, 517, 542
 Speer A., 2, 331, 481
 Spiazzi R. M., 469
 Stadler H., 408
 Steel C., 73-75, 103, 335, 408
 Steele R., 11
 Stefano di Provins, 403
 Stern J., 549
 Stone P., 273
 Stornajolo C., 323
 Street T., 503
 Strobino R., 91, 107-108, 110, 134, 451, 455, 459-460, 462-463, 468
 Stroumsa S., 157
 Sturlese L., 409
 Stuyven W., 74
 Sulṭān Muḥammad Ibn Rafī' al-Dīn Muḥammad Iṣfahānī, 58
 Suter H., 276
 Szilágyi K., 26
- Takahashi A., 408-409
 Taylor R., 220, 300
 Taymūr A., 370
 al-Ṭayyib, Abū al-Faraġ, 170-171, 275-276, 309, 312-314, 316
 Temistio, 239, 257-258, 276-277, 279, 317-318, 320, 376, 460, 462
 Teodorico di Chartres, 515, 536, 539
 Teodoro Gaza, 409
 Teofrasto, 257
 Terrier M., 555
 Thijssen H., 223
 Thijssen J. M. M. H., 223
 Thom P., 96
 Todd R. B., 257
 Tolomeo Claudio, 304, 316, 325, 369
 Tommaso d'Aquino, 224, 338, 345, 407, 469, 528, 551
 Torella J., 159
- Trapp E., 159
 Tremblay B., 74, 102
 Türker M., 101, 276
 al-Ṭūsī, Naṣīr al-Dīn, 38, 57
 Twetten D., 273
 Tzvi Langermann Y., 26-27, 33, 367
- Ugaglia M., 239
 Ugo Benzi, 223
 Ugo di San Vittore, 548
 Ullmann M., 367, 420
 Urmson J. O., 222
- Vagelpohl U., 157, 179-180
 Van Den Abeele B., 407, 409
 Van Melsen A. G., 221
 Van Oppenraay A. M. I., 220, 243, 403-409, 412
 Van Riet S., 1, 4, 20, 25, 32, 74-75, 77, 85-86, 219-220, 223, 230-231, 233, 236, 324, 327, 333, 343, 365-367, 376, 381, 385, 388, 406, 410, 417-426, 433-437, 448-449, 481-482, 512, 521-522, 524
 Vegas González S., 14
 Vehlowl K., 2
 Veltri G., 317
 Verbeke G., 219-220, 233, 236, 365, 481
 Verre, 8
 Verrycken K., 222
 Vicaire M.-H., 24
 Vidal S., 367
 Villar García L. M., 515
 Vincenzo di Beauvais, 318, 322
 Vinti C., 371
 Virgilio, 7, 9, 12
 Vlasschaert A. M., 518
 Volmar (Maestro), 407
 Volpoët M.-O., 331
 Vrolijk A., 223, 243
 Vuillemin-Diem G., 417
- Wallies M., 460, 462
 Wallis F., 340, 482
 Watt J. W., 156, 172, 179, 258
 Wegener L., 2, 331

- Weijers O., 482
Weisser U., 402
Welch A. T., 17
Werner D., 106, 339
Westerink L. G., 277
Wieland G., 443
Wieland W., 246
Wildberg C., 222, 295
Wirmer D., 481
Wisnovsky R., 58, 340, 482, 534
Witkam J. J., 38, 390
Woerther F., 149, 152, 177, 180, 182, 186, 211-212
Wolff F., 255
Wolter A. B., 470
Wood R., 102, 469, 471
Wright W., 248
Würsch R., 72, 172
Yaḥyà Ibn 'Adī, 276, 314
Yaḥyà Ibn al-Biṭrīq, 275, 402-403
Yamamoto K., 420
Yarshater E., 366, 503
al-Yāsīn D., 240, 270, 385
Yūsuf Z., 502
Zalta E. N., 2, 87, 223
Zāyid S. (Zayed), 227, 240, 242, 250, 269, 286, 331, 381, 402, 444, 481, 502
Zenone, filosofo citato da Alberto Magno, 87-88, 94
Zghal H., 89, 91
Zimmermann A., 73, 273, 402, 443
Zimmermann F., 179
Zonta M., 2, 276, 334

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